Record
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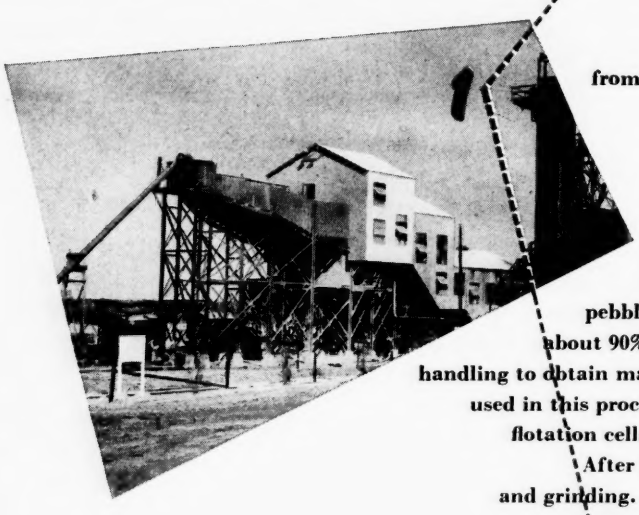
PORT OF BALTIMORE
Export Tonnage — See Page 6
FEBRUARY 1948

HOW INTERNATIONAL RECOVERS LIFE-GIVING PHOSPHATE ROCK AT ITS FLORIDA OPERATIONS

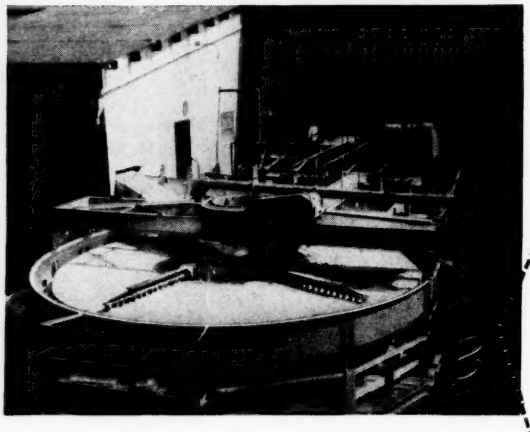


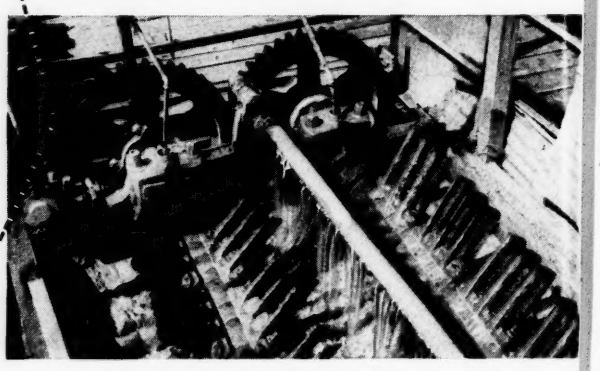
Phosphate rock matrix is pumped directly from the mine field through pipelines to the top of washer plant as shown in photo No. 1.

It then passes through the log washer (photo No. 2) where paddles and additional water reduce it to a slurry of pebbles, sand and water.

This slurry passes over screens which separate pebbles as to size. The smaller pebbles, representing about 90% of total phosphate intake, require extensive handling to obtain maximum recovery. Equipment used in this process includes classifiers, (photo No. 3) tables, flotation cells and huge, outdoor settling tanks.

After recovery, the phosphates are then ready for drying and grinding.





PHOSPHATE DIVISION

International

MINERALS & CHEMICAL CORPORATION

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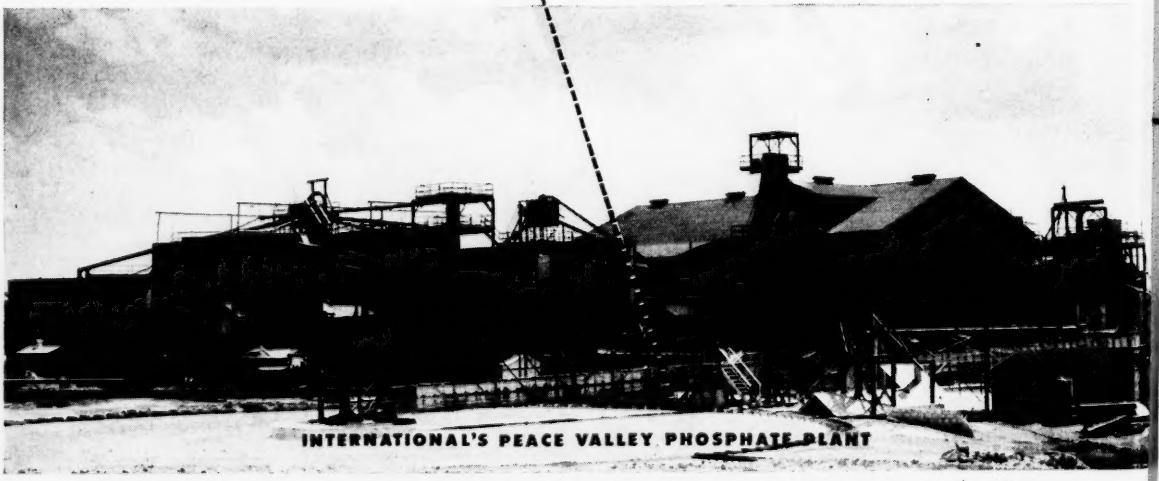
This is the second in a series of 3 pictorial descriptions showing primary operations in the Mining, Recovery and Preparation of International Phosphate Rock for use in industry and agriculture.



INTERNATIONAL'S PEACE VALLEY PHOSPHATE PLANT

MANUFACTURERS RECORD

ESTABLISHED 1882

Devoted to the Industrial Development of the South and Southwest

Volume 117 **February, 1948** **Number 2**

EDITORIALS

Little Grains Of Sand 23
Primarily Political 31
Consumer Chemical Products 32
Industrial Progress 32

FEATURE ARTICLES

Report On The World 33
By Frank Gould
Cost Accounting Facts And Fantasies—II 35
By Paul T. Norton, Jr.
Creative Effort—Key To Balanced Economy 37
By Raymond B. Seymour
No Apologies For Materials Handling 38
By Sidney Reibel
Southern Construction Totals For January 40
By Samuel A. Lauver
Finished Product Machinery For The Citrus Fruit Industry 42

DEPARTMENTS

Southern Business Outlook 9
The Southern Spotlight 11
Piedmont Area—J. A. Daly 11
The Southeast—John Mebane 12
Birmingham District—R. W. Kincey 52
The Southwest—Dan Summers 54
New And Expanding Plants 15
Potomac Soundings 18
By Laurence Sullivan
Southerners At Work 44
New Products 47
Trade Literature 51
Letters 62
Coming Events 66
Index For Buyers 74
Index Of Advertisers 76

MANUFACTURERS RECORD PUBLISHING CO.

Publishers of Manufacturers Record, Construction, Daily Construction Bulletin and Blue Book of Southern Progress.

Frank Gould ..... President
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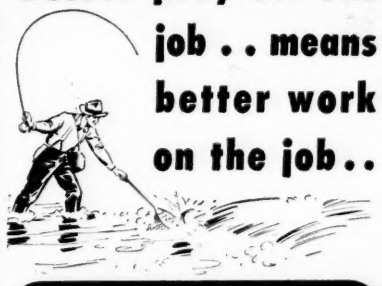
——Main Office: 109 Market Place, Baltimore 3, Md.——
Phone: LExington 7065

"The Manufacturers Record," published monthly by Manufacturers Record Publishing Co., 109 Market Place, Baltimore 3, Md. Entered as second class matter Baltimore, Md., under the act of March 3, 1879. Volume 117, No. 2. Single Copies 35c.

Better play off the job . . means better work on the job . .



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UNITED STATES STEEL

COVER ILLUSTRATION — The scene reproduced on this month's cover was created, with natural variations, some 4,500-odd times during 1947 as approximately that number of deep sea ships entered the Port of Baltimore from 159 foreign and domestic ports. The result: latest available figures reveal that for the first 8 months of 1947, Baltimore's export trade volume totaled 9,678,000 long tons, and exceeded that of any other American port, while imports of 5,044,000 long tons placed her in second position, behind New York. Our cover, then, symbolizes the healthy shipping activity which has established the Maryland port as the number one port in export tonnage. (Photo by A. Bodine, courtesy Baltimore Association of Commerce.)

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MISSOURI DIVISION of RESOURCES and DEVELOPMENT
Jefferson City, Mo.
or 1809 G. St. N. W., Washington, D. C.
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(I-16)

Southern Business Outlook

Southern factory output continued strong in the latest month with increases noted in both durable and nondurable goods. Total production showed a 6 per cent climb over the preceding month and a 24 per cent increase over the previous year's figure.

Crude petroleum output again registered an increase after falling off slightly in the preceding month. However, steel and pig iron output and lumber production registered moderate decreases.

Cash resources continued in good supply as Federal Reserve member banks reported a rise in bank deposits of $129 million over the preceding month.

Value of retail sales spurted upward, due partially to a continued rise in prices of most goods. Practically all 16 states reported increases in employment in the manufacture of both durable and nondurable goods.

MONTHLY INDUSTRIAL ACTIVITY

(16 Southern States)

	Latest Month	*Preceding Month*	*Year Ago*
All Manufacturing (value)	$3,131,314,000	$2,942,083,000	$2,512,081,000
Durable Goods (value)	1,122,783,000	1,062,095,000	855,142,000
Nondurables (value)	2,008,531,000	1,879,988,000	1,656,939,000
Steel Output (tons)	1,164,820	1,201,873	1,036,689
Pig Iron Output (tons)	805,256	834,401	716,677
Cotton Consumed (bales)	672,421	724,564	773,200
Spinning Activity (1,000 spindle-hrs.)	8,013,000	9,032,000	7,394,000
Pine Lumber Cut (board feet)	63,537,000	64,079,000	64,221,000
Electric Output (1,000 kilowatt-hrs.)	5,815,260	7,501,015	5,335,711
Construction Awards	$ 174,091,000	$ 257,608,000	$ 134,481,000

FARMS AND MINERALS

Farm Marketings (value)	$1,410,144,000	$1,057,168,000	$1,225,444,000
Meat Production (head slaughtered)	1,578,631	1,675,150	1,298,426
Coal Output (tons)	26,476,000	27,781,000	19,838,000
Crude Petroleum Output (barrels)	106,636,590	102,709,500	92,195,550

FINANCE AND DISTRIBUTION

New Corporations (number)	1,752	1,898	1,881
Business Failures (number)	43	43	14
Bank Deposits	$ 10,081,000	$ 9,952,000	$ 7,927,000
Bank Clearings	$6,718,751,000	$7,544,221,000	$6,113,815,000
Retail Sales	$2,870,825,000	$2,602,339,000	$2,643,316,000
Carloadings	1,226,700	1,305,200	1,155,877
Imports (tons)	1,576,000	1,572,750	1,201,500
Exports (tons)	5,604,500	5,968,800	3,332,600

MANUFACTURING EMPLOYMENT

(Persons Employed)

	Durable Goods		*Nondurables*		*All Manufacturing*	
	Latest Month	*Preceding Month*	*Latest Month*	*Preceding Month*	*Latest Month*	*Year Ago*
Alabama	140,000	138,000	95,000	93,000	235,000	225,000
Arkansas	48,000	47,000	24,000	23,000	72,000	68,000
Florida	33,000	32,000	49,000	48,000	82,000	89,000
Georgia	71,000	70,000	186,000	182,000	257,000	247,000
Kentucky	64,000	63,000	69,000	68,000	133,000	128,000
Louisiana	57,000	57,000	86,000	86,000	143,000	129,000
Maryland	115,000	113,000	116,000	116,000	231,000	241,000
Mississippi	58,000	57,000	35,000	34,000	93,000	89,000
Missouri	153,000	152,000	213,000	209,000	366,000	351,000
North Carolina	90,000	89,000	288,000	281,000	378,000	367,000
Oklahoma	21,000	21,000	35,000	35,000	56,000	55,000
South Carolina	36,000	36,000	157,000	154,000	193,000	187,000
Tennessee	93,000	92,000	159,000	156,000	252,000	243,000
Texas	139,000	138,000	208,000	201,000	347,000	329,000
Virginia	68,000	68,000	150,000	148,000	218,000	211,000
West Virginia	88,000	87,000	51,000	50,000	139,000	132,000
South	1,274,000	1,260,000	1,921,000	1,884,000	3,195,000	3,091,000

Of the above tabulation, data for Florida are figures rounded to nearest thousand from the monthly statistical report of Florida Industrial Commission; Maryland, State Department of Labor and Industry; Louisiana, Louisiana State University, College of Commerce; North Carolina, State Department of Labor; Oklahoma, State Employment Security Commission; Tennessee, State Department of Employment Security; Texas, The University of Texas, Bureau of Business Research; Virginia, Department of Labor and Industry. In the absence of cooperative aid from other states, the remaining figures are result of monthly surveys by MANUFACTURERS RECORD.

Now the Villain shrieks

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The Southern Spotlight

The Piedmont Area

BY J. A. DALY

Charlotte—The intensely industrialized Piedmont Area's prospects were bright, highlighted against the somewhat spotty economic background of Southeastern agriculture, as the New Year's first month elapsed. Through January, practically everything in Piedmont economy progressed smoothly. Thoughtfulness marked management's attitude toward persistent demands at record levels of volumes and prices for products of factories and farms. Practically all available statistics for the area represented new highs. A strong tendency on the part of manufacturers and processors to reduce cash discounts to customers was reported while prices ruled firm. Political and business leaders, and the "white collar class" persisted in a chorus of complaints about the high costs of living as February arrived. Executives of grocery store chains reported the foodstuffs price index at a new historic high in mid-January and still higher prices were forecast.

RETAIL TRADE

• **Sales.** Department stores' advertising volume expanded widely in January often emphasizing luxury goods. Apparel and specialty shops and furniture retailers gave some emphasis to selective price markdowns. The usual January textile sales were not held. In general, retail demand for luxury goods was off slightly in January but consumer interest was maintained in good quality, moderately priced staple lines. Little resistance developed when men's and boys' clothing prices were advanced 5 to 10 per cent.

• **Automotive.** The automotive trade continued strong. New car demand still exceeded dealers' record allotments. Sales drives were started by dealers in several popular lines of trucks, offering newly redesigned models.

PRODUCTION

• **Fuel.** Industrial fuel supplies were adequate late in January. Shortages of fuel oil for domestic heating were acute throughout January, with small chance of early relief. Domestic coal supplies were barely equal to peak demands. Prices of all fuels were moderately increased.

• **Electric.** Over the Piedmont area, power consumption was estimated at 25 per cent above levels of 1945. Late in January supplies were adequate but reserve production capacity was described as very small. Consequently, the outlook for the Spring peak-load season was uninspiring. With prices easing and Merchandise supplies increasing in quantity and variety, sales of electric appliances are continuing at exceptionally high levels. Merchants are promoting these sales, which tend to enlarge the already record demand for electric current.

All companies producing electric power for Piedmont are speeding long-term expansions programs under difficulties caused by material scarcities. Executives of the larger companies reported that this Piedmont area industry will share liberally in the forecast 1948 national total of $1,750,000 in power expansion. The Duke Power Co. announced delay of essential equipment but forecast that operation of 100,000 horsepower cliffside expansion will begin in March. Several large Piedmont area rural electrification expansion projects were assured through Federal financial aid. Among these, the French Broad Electric Co-op of Marshall, N. C., received an $880,000 REA loan to extend lines 274 miles and serve 1,443 additional customers.

• **Chemicals.** Chemical industry sources reported that current scarcities may become more troublesome by Spring. Prospects are unfavorable particularly for some dyestuffs, caustic soda, and nitrate of soda, the latter essential to commercial fertilizer.

• **Furniture.** The furniture manufacturing industry predicted new record production the first half of 1948. Allocation of bedroom, dining room and some other lines may continue through the summer. Shortage of steel products and upholstery fabrics are hindering production. Some concern was aroused in the industry by a so-called price rebellion by retail buyers at the recent Chicago Furniture Mart. However, Carolina factories wrote satisfactory volumes of forward business.

These manufacturers have sold outputs three to six months ahead at prices 5 to 10 per cent higher than late 1947. Manufacturers answered retailers' complaints by asserting that current excess of demand over supply made design changes generally inadvisable. At retail, furniture sales were holding around record dollar volumes. Numerous retailers engaged aggressively in January sales promotion emphasizing special prices.

AGRICULTURE

• **Prices.** Early in 1948, the general level of farm prices was at a record peak, up 5 per cent from November. Clouded prospects for tobacco, cotton, peanuts and perhaps other crops influenced farmers' spokesmen to urge still wider diversification of farming. Livestock at Piedmont markets maintained rising trends in January. Record prices encouraged larger marketings of cattle. Hog prices were steady in Mid-January, tops ranging from $24.50 to $28.50 per hundredweight.

• **Sales.** The Flue Cured Tobacco Co-op Stabilization Corp. bought more than 215,000,000 pounds, approximately 16 per cent of the 1947 gross sales of these types on a basis of about 33 cents a pound to maintain the 90 per cent of parity support price. This largely reflected Britain's embargo against U. S. leaf tobacco and products. Consequently, the 1948 U. S. acreage will be reduced 28 per cent for the 1947 total, a hard blow to Piedmont tobacco growers.

IMPORTS AND EXPORTS

• **Textiles.** Increasing threats of progressive competition by Japan's textile industry in American mills' domestic and foreign markets threw industry executives into a dither. Dr. W. P. Jacobs, president and two other American Cotton Manufacturers Association leaders flew to Japan as Army guests to see accord with General MacArthur's occupation headquarters whereby rehabilitation of Japan's textile industry can be encouraged while protecting American textile's wartime and postwar economic gains.

• **Tobacco and Cotton.** Farm leaders continued late in January their conferences with Federal officials on proposals to reopen the normally great export trade in tobacco and cotton through the Marshall plan operations. Drastic reductions in exports of these commodities noticeably affected prices of 1947 yields. However, exports of cotton and other textiles in 1947 attained the record volume of more than $1,500,000,000 with Piedmont mills sharing liberally.

CONSTRUCTION

• **Housing.** Through January, Piedmont area newspapers published a rash of new construction announcements, largely residential. Needs for new industrial construction are great

(*Continued on page* 12)

The Southern Spotlight

(*Continued from page* 11)

but engineers said proposing builders are hesitant. Nevertheless, the volume of construction is tremendous. Engineers reported really great totals of capital investment are represented by projects in the blueprint stage.

• **Prices.** The Carolina Lumber & Building Supply Association, Charlotte headquarters, forecast for 1948 a 10 per cent reduction in construction costs; higher quality of most materials; generally balanced supply and demand; healthy competition. Shortages of metals still are plaguing many Piedmont business segments. Dearth of cast iron pipe brought complaints over delays at many projects.

• **State.** The South Carolina Government entered into a $10,260,000 expansion program for 15 state institutions. Both Carolinas are maintaining large-scale highway programs.

• **Federal.** Federal funds totaling $6,284,250 were assured for one-third of construction costs of nine hospitals in North Carolina towns.

LABOR

• **Employment.** Piedmont employment was increasing during January to forecast new records, and wages were at all-time high averages. Peace prevailed between the area's management and labor. Highly placed men in the region's finance and industry were spreading quietly the advice that business should carefully avoid becoming excited over the developing political arguments.

All dependable forecasts were that employment will hold steady at least until mid-year. The North Carolina Employment Commission estimated the state's non-agricultural employment in January at 891,000 persons, an increase of 116,500 from July, 1947.

• **Shortages.** With industry operating near capacity, skilled labor shortages continue troublesome. Supply and demand for unskilled industrial labor are about balanced. Agricultural employment is at its seasonal low but acute shortages of farm labor appear inevitable a few months hence.

• **Wages.** Industry leaders admitted fears over future wage demands are based in part on the knowledge that little additional production is possible in the plants. Profit margins and earnings volumes therefore can be maintained only by compensatory price advances when costs increase. Occasionally, an industrial spokesman warns that the forecast "third round" of wage boosts will compel further increase in manufactured goods prices. Piedmont area labor leaders announced that, particularly in the textile industry, further wage raises will be sought "at the proper time."

The North Carolina Labor Department reported that the state's manufacturing wage average rose 5 per cent during November to $40.19 per week or slightly more than $1 an hour. The average for the state's 141,600 textile employees increased 3 cents per hour to $1.03, giving a record weekly wage of $40.65.

• **Union Activity.** As the presidential campaign began developing, a political move in North Carolina, which was reported under big headlines in the daily press, was the formation by the CIO and AFL unions' leaders of their United Political Action Committee. Spokesmen explained that this unification was preliminary to participation in the approaching campaigns for Federal offices.

FINANCE

• **Earnings.** Several dependable statistical agencies figured that per capita income over the Carolina Piedmont in in 1948's first half will increase slightly over the 1947 record rate.

Banks reported 1947 earnings at new highs and deposits were continuing a slow rise above the all-time high totals, excluding Government deposits.

• **Dividends.** The flood of New Year dividends by prosperous corporations was a big factor in the gain of about 15 per cent in bank clearings at Piedmont centers during the first half of January, compared with the same 1947 period.

• **Stocks & Bonds.** Outstanding increases in bids for textile company common stocks are these: recent bid compared with Dec. 31, 1946: Belton: $270, $125; Chiquola, $95, $50; Gaffney, $105, $80; Laurens, $170, $119; Monarch, $171, $123; Norris, $220, $125; Woodside, $99, $28.

Showing textile industry increases: One share each in ten companies could have been bought Dec. 31, 1946, for $1,140; annual dividends, $70; same shares cost lately, $1,396; annual dividend, $151.

• **Bank Clearings.** Reflecting the 1947 prosperity and supporting 1948 optimism, Charlotte, a typical Piedmont community, reported these official 1947 bank clearing records: Year, $3,636,029,117, up $500,000,000 over 1946 and up $1,300,000 over 1945; December, $357,696,018 up $51,336,000 over the 1946 month.

• **Government Collections.** North Carolina State's general fund tax collections in the first six months of the current fiscal year (to Dec. 31) totaled $74,312,587, up $11,756,000 over the comparable 1946 figure.

Federal tax collections in North Carolina for the same six months totaled $587,074,243, up $45,642,543 over the corresponding previous period. December collections of $100,960,825 were $8,889,808 over the 1946 month's total.

Charlotte's postal receipts for 1947 were approximately $250,000 above the 1946 record of $1,810,000.

The Southeast

BY JOHN MEBANE

Atlanta—Harbingers of economic woe to the contrary, the Southeast, as a whole, after having experienced a record-breaking year in 1947, from the standpoint of money spent, began 1948 with a continuing shower of spending. A recapitulation indicates that department stores sales throughout most of the region last year exceeded even the record high of 1946. Bank debits, generally, showed gains during 1947, as did bank loans. The dollar, meanwhile, continued to shrink in value, and the cries for pay raises are now beginning to mount.

RETAIL TRADE

• **Sales.** In the sixth Federal Reserve District, department stores had sold goods with an estimated value of $53,000,000 through November, according to the Federal Reserve Bank of Atlanta. Indications now are that sales continued at such a high rate during December to bring the total for the year up to $527,000,000 or better. By contrast, the 1946 total was $507,000,000. The bank, in its Monthly Review, points out that there were, proportionately, differences in the types of goods sold. Consumers bought, and are continuing to buy, more durable goods as the supply increased. These include refrigerators, washing machines and other household appliances, plus a variety of household furnishings. On the other hand consumers are spending less for such nondurables as women's and misses' clothing. One exception is the increasing dollar sales of men's clothing.

• **Atlanta Boom.** In Atlanta itself, aggregate retail sales

(*Continued on page* 52)

NEW AND EXPANDING PLANTS

COMPILED FROM REPORTS PUBLISHED IN THE DAILY CONSTRUCTION BULLETIN

ALABAMA

BIRMINGHAM—Diboll-Kessels and Associates, Grayhound Bus depot.
GADSDEN—Coca-Cola Bottling Co., garage building, $30,000.
HUNTSVILLE — Hill Chevrolet Co., one-story sales and service building, $125,000.
JACKSON—Cairke-Washington Industries, Inc., addition to Clarke Mills, new equipment, $220,000.
MOBILE — Southern Bell Telephone and Telegraph Co., addition to main office building, $227,235.
MONTGOMERY — Dairy Producers, milk processing and ice cream factory, $279,000.
MONTGOMERY—Southern Bell Telephone and Telegraph Co., main toll and office building, $400,000.
ONEONTA—Blue Bell, Inc., overall factory, $1,500,000.

ARKANSAS

HOT SPRINGS — Ed. B. Mooney, Inc., garage and service station, 608 Malvern Ave., $40,000.
JONESBORO — Arkansas Rice Growers Cooperative Association, rebuilding, enlarging, modernizing rice mill.
JONESBORO—Group of Northeast Arkansas Farmers, Arkansas State College, planning cooperative fertilizer plant, $250,000.
LITTLE ROCK—Essick Co., plant to manufacture air-cooling equipment on Roosevelt Rd., site, $200,000.
LITTLE ROCK—Southwestern Bell Telephone Co., converting facilities at Fayetteville from manual todial operation plus new building and equipment, $700,000.
WEINER — Arkansas Rice Growers Cooperative Association, cooperative rice storage plant.

FLORIDA

HIALEAH—Pan-American Corp., one-story warehouse, $17,000.
JACKSONVILLE—H. J. Heinz Co., one-story warehouse, corner of Dennis and Cantee Sts.
JEWFISH KEY—Greyhound Post Houses, Inc., one-story bus terminal, $30,000.
MIAMI—Cobbs Fruit Co., one-story packing plant building, 396 NE 79th St., $20,000.
MIAMI — Luby Chevrolet Co., one-story parts and service building, NW 7th Ave., $50,000.
MIAMI — Model Land Co., auto storage garage, NE corner SE 2nd Ave. and SE 2nd Sts., $1,000,000.
MIAMI—Stobs Brothers Construction Co., office and storage building, 7010 NE 4th Court, $13,000.
MIAMI — Vernor Gingerale Bottling Co., commercial building NW 21st and 14th Aves.
PENSACOLA — Polar Ice Cream Co., ice cream plant, A and Gregory St., $40,000.
ST. PETERSBURG—Pinellas Auto Speedway, Inc., steel and concrete grandstand, $50,000.
SURFSIDE—Graim, Inc., swimming pool, 9033 Collins Ave., $20,000.
TAMPA—Tampa Tribune, alterations and additions to Tribune Building, $100,000.
WINTER PARK—Winter Park Telephone Co., exchange building, $40,000.

GEORGIA

ATLANTA—Federal Communication Commission, television station to be located atop Constitution building, $250,000.
ATLANTA—Southern Mills, Inc., addition to plant.
ATLANTA—Standard Oil Co. of Kentucky, new bulk plant on Bulkhead Ave., $800,000.
AUGUSTA—E. W. Tompkins and H. D. Carmichael, modern motor speedway on Milledgeville Rd. near Camp Gordon's gate number 3, $25,000.
CARROLLTON—Carroll Electric Membership Corp., headquarters building, $71,850.
COLUMBUS—Lummus Cotton Gin Co., office addition, $51,000.
DALTON — Duchess Chenilles, Inc., acquired Hanson Chenille Co. and equipment for expansion.
MILLEDGEVILLE—J. P. Stevens and Co., converting Naval Ordnance plant into woolen fabric mill.
MOULTRIE—Moultrie Cotton Mill, weave shed and shipping room.
THOMASVILLE—Southern Bell Telephone and Telegraph Co., dial and toll office building.
VIENNA—Middle Georgia Electric Membership Corp., headquarters facilities, $65,000.

KENTUCKY

BOWLING GREEN—General Electric, acquired plant for production of water coolers

FRANKFORT—Public Service Commission, authorized West Kentucky Gas Co. to construct gas line, $97,800.
LOUISVILLE—L. J. Hannah and Co., truck garage, 745 S. 3rd, addition to present garage facility, $35,000.
LOUISVILLE—National Distillers Products Corp., remodeling existing building, 2730 W. Broadway, $20,000.
PUDUCAH—Doena Artware Co., addition to plant, $200,000.
PUDUCAH—Ray-O-Vac Co., acquired building, Ninth and Harrison Sts., to produce dry cell batteries.

LOUISIANA

AMITE — Dairy Employees Drivers and Maintenance Union, AFL, milk processing plant in Tangipahoa Parish, $1,000,000.
ARABI—American Sugar Refinery, rebuilding entire quarter mile wharf destroyed by fire.
BATON ROUGE—Development laboratory and pilot plant, Bodman and Murrel, 713 Reymond Building, architect.
BATON ROUGE—Louisiana Creamery Co., two-story building.
CONVERSE—S. B. Evans, V. H. Brumley, R. M. Rogers, 15 ton capacity ice plant.
EUNICE—Farmer's Dryer and Storage Co., Inc., rice dryer and storage warehouse, $175,000.
EUNICE—Kelly-Weber Co., Inc., fertilizer plant.
GUEYDAN — Cooperative organized with I. H. Boatner, plant for drying and storing rice, $140,000, Gulf Public Service Co., Inc., ice plants and ice plant improvements throughout state, $200,000.
KINDER — Kinder Rice Drier, Inc., acquired site for rice drier and warehouse, $140,000.

New and

Expanding Plants

Reported:

January—234

LAFAYETTE—Evangeline Pipe Supply Co., Commercial Building, $25,000.
LAFAYETTE—Huval Baking Co., addition to bakery, $26,636.
LAFAYETTE—R. H. Martin, Texaco Station, corner of Cypress and Garfield Sts., $25,000.
MONROE — Negley Co., bag plant in Brownsville near Monroe, $46,682.
NEW ORLEANS—Board of Commissioners, Orleans Levee District, bus terminal building, Ponchartrain Beach, terminus of Elysian Fields Ave.
NEW ORLEANS—Fulton Bag and Cotton Mills Co., addition to factory buildings, corner St. Peters and Thalia Sts., $200,000.
NEW ORLEANS—Jackson Brewery, building to be known as cellar No 13.
NEW ORLEANS—M. G. Loubat Distributing Co., warehouse and office building, Clio and S. Claibourne Ave.
NEW ORLEANS—New Orleans Butchers Cooperative Abbatoir, Inc., tool shed, $25,000.
NEW ORLEANS—Texas Co., gasoline station, $10,000.
OBERLIN—Oberlin Cooperative Rice Drier, Inc., rice drier and storage plant near Oberlin, $100,000.
PINEVILLE—Harrison Lumber Co., sawmill to be located south of L and AKCS railroad tracks, $1,000,000.
SHREVEPORT—Chris H. Berg, has land on market St. to build brick buildings as extension to plumbing and air conditioning business.
SHREVEPORT — Pelican Well and Tool Supply Co., warehouse building, 907 McNeil St., $42,000.

WINNFIELD — Southern Bell Telephone and Telegraph Co., telephone exchange building, $50,000.

MARYLAND

BALTIMORE — Associated Canners Corp., storage buildings, $15,000.
BALTIMORE—Baltimore Aircoal Co., acquired building, 715 W. Pratt St., to use as assembly plant, planning new plant.
BALTIMORE — Baltimore Salesbook Co., addition to manufacturing building and printing plant, 3132 Frederick Rd., $40,000.
BALTIMORE — Brooklyne Chemical Co., warehouse, 930 Chart Ave., $62,400.
BALTIMORE—Baltimore and Ohio Railroad, major equipment and improvements during the next five to ten years, $250,000,000.
BALTIMORE—Berger Motor Co., auto service building, $32,000.
BALTIMORE—Christian J. Braun, storage building, 2025 Ontario St., $20,000.
BALTIMORE—Chemical and Pigment Co., manufacturing building, 6401 St. Helena Ave.
BALTIMORE — Chesapeake Paper Board Co., open storage shed, 1605 Key Highway.
BALTIMORE — Coca-Cola Bottling Co., plant, 1025 W. Ostend St., $20,000.
BALTIMORE—Consolidated Gas and Electric Co., construction and expansion program at Riverside, Westport and numerous substations, $50,000,000.
BALTIMORE—Eastern Venetian Blind Co., plan to enclose portion of six acre parking lot for manufacturing.
BALTIMORE—J. H. Filbert Co., warehouse and processing building, 2415 W. Franklin St., $450,000.
BALTIMORE—Hanah and Samuel Stofberg, service station, 2207 Kirk Ave., $15,000.
BALTIMORE — Harbison-Walker Refractories Corp., office building, 1200 Patapsco Ave., $17,800.
BALTIMORE—George P. Mahoney, storage building, 3801 Mahoney Ave.
BALTIMORE — Philipp Engineering Co., manufacturing plant, 1200 Macon St.
BALTIMORE — Rezort Corp., alterations, 216 W. Baltimore St., $16,000.
BALTIMORE—Edward Rooney, Washington, D. C. Ford Motor Sales and service building, 3701 Fleet St.
BALTIMORE—Signode Steel Strapping Co., factory building, Wise Ave. and North Point Rd.
BALTIMORE—Talbott Motor Co., sales and service building addition.
BALTIMORE COUNTY—City Real Estate Co., service station, SW corner Edmondson Ave. extension and Charing Cross Rd.
BALTIMORE COUNTY—Donnybrook Apts. Corp., 23 private garages, south side Burke Ave., $11,200; 26 private garages, west side Stevens Lane, south of Hillen Rd., $10,400.
BALTIMORE COUNTY—Samuel M. Pistorio, shop offices and storage building, SE corner of Coolidge and Constance Aves., $25,000.
CUMBERLAND—Chesapeake and Potomac Telephone Co., improvement of facilities in that area.
CUMBERLAND—Tri-State Paper Co., addition, 109 S. George St., $12,000.
FREDERICK—Muse Tailoring Co., plant, S. Wisner St., orders placed for new machinery.
REISTERSTOWN—American Oil Co., plans for service station.

MISSISSIPPI

BOONVILLE—Prentiss Manufacturing Co., and Longino Bethay and Associates, plan garment factory, First and Adams Sts.
CLEVELAND — Greyhound Bus Co., bus station, corner Highway 61 and Sunflower Rd., $50,000.
HATTIESBURG—Barron Motor Co., auto building, Hardy St., $25,000.
HATTIESBURG — Russel Lyter, designer, new building, $45,000.
JACKSON — General Electric Co., expansion program, will add approximately 100,000 sq. ft., $750,000.
MERIDIAN—Southern Bell Telephone and Telegraph Co., converting to dial system, and installing long distance lines, $1,645,000.
QUITMAN—Quitman Motor Co., auto sales and service building.
RIPLEY—Ripley Business Association, new factory.
VICKSBURG—Coca-Cola Bottling Co., addition to plant.
VICKSBURG—Mississippi Power and Light Co., office building on east side of Monroe between China and Clay Sts., $75,000.

MISSOURI

ST. LOUIS—American Stove Co., warehouse.

NEW AND EXPANDING PLANTS

2001 S. Kingshighway, $10,000.

ST. LOUIS—Bilgere Chevrolet Co., garage 2815 N. Grand Boulevard.

ST. LOUIS—Dorothy P. Bouchaert, auto repair shop.

ST. LOUIS—Campbell-Taggart Association Bakeries, addition to garage and repair shop, 4410 Gravois, $75,000.

ST. LOUIS—City Bus Terminal Co., Inc., alterations to present building and addition to terminal, 412 Washington Ave., $100,000.

ST. LOUIS — General Mercantile Co., acquired warehouse, plan renovation.

ST. LOUIS—Walter F. Hellmich, Inc., auto sales and service building, 3620 Gravois.

ST. LOUIS—Krey Packing Co., meat processing and storage building, 3826 N. 21st. St.

ST. LOUIS—Lewin-Mathes Co., factory addition, 3100 N. Broadway, $10,000.

ST. LOUIS—Mallinckrodt Chemical Works, 9 chemical storage tanks, footings, concrete dike walls, 109 Angelrodt.

ST. LOUIS—Medart Auto Electric Co., addition to repair shop.

ST. LOUIS — Midwest Wire and Paper Products Co., has acquired building, plan renovation.

ST. LOUIS—Missouri Pacific Railroad Co., improements in its lines and subsidiaries during 1948 to total $11,161,360.

ST. LOUIS—Monsanto Chemical Co., testing laboratory, $60,000.

ST. LOUIS—St. Louis Diecasting Corp., addition to warehouse, 4516 Oleatha, $15,000.

ST. LOUIS—Vonder Harr Sand and Gravel Co., steel bin for sand and gravel, $10,000.

NORTH CAROLINA

ASHEVILLE—Miller Printing Co., Inc., addition to present plant, 15 Rankin Ave., $73,000.

ASHEVILLE—Skyland Hosiery Mills Co., hosiery mill in Johnson school section, $1,200,000.

BURLINGTON — Bur-Con Hosiery Mills, Inc., moving from Asheboro to Burlington, new machines on order.

CHARLOTTE — Southern Bell Telephone and Telegraph Co., addition to present exchange building, N. Caldwell St., $1,800,000.

CHARLOTTE — Southern Standard Mill Supply Co., distribution center, office and plant building, corner of S. Tryon and Dunavent Sts., $80,000.

DURHAM—Liggett and Myers Tobacco Co., cigarette factory.

HICKORY—Century Furniture Co., plant facilities for the production of case goods.

LENOIR—Caldwell Full Fashioned Hosiery Mills, Inc., hosiery plant on Insurance St., $400,000.

MOCKSVILLE — Monleigh Garment Co., plant for manufacture of clothing.

MONROE—Joseph Handlesman, plant for manufacture of men's wear.

MORGANTON—Burke Freezer Locker Co., plan construction of building.

MORGANTON—Skyland Textile Mills, plant for manufacture of children's and infants' wear.

NEWTON—Haffer Motor Co., garage for farm implements, $80,000.

RAEFORD—White-Tex Mills, Inc., expansion program, addition to manufacturing space and machines, $1,000,000.

SALUDA—William R. Friedman Co., New York, factory building to house new hosiery plant.

TAYLORSVILLE — Schneider Mills, Inc., start operations in new building sometime next year.

WILMINGTON — Christy Reggie, H. E. Boyd and Associates, plan establishment of shoe factory.

OKLAHOMA

ARDMORE — Ardmore Sample Cut Co., building to house sample cut library, $12,000.

IDABEL — William Kilgore, frozen food locker plant, $20,000.

MUSKOGEE — Container Corporation of America, box plant.

OKLAHOMA CITY—DeCoursey Milk Co., milk processing plant, 23rd. and Kelly.

OKLAHOMA CITY—Oklahoma Industries, Inc., industrial and residential development being planned on 181 acres north of city.

PAWHUSKA—Osage Packing Corp., plan packing plant.

TULSA—George Chevrolet Co., expansion program: additions, new buildings, etc., $400,000.

TULSA—Wood Marine Engineering Corp., expansion program, $200,000.

SOUTH CAROLINA

AIKEN — Aiken Coca-Cola Bottling Co., bottling plant and additions to boiler.

BELTON — Textron Mills, sewing plant, $60,000.

CALHOUN FALLS—Calhoun Mills, addition for card and spinning operations.

CAMDEN—E. I. DuPont de Nemours and Co., textile plant, possibly in Camden, other sites under consideration, $20,000,000.

CHERAW—J. P. Stevens Co., textile finishing plant near Kollocks on Seaboard Airline Railway, $15,000,000.

CONWAY—Public Service Authority, warehouse in connection with Santee-Cooper project.

GAFFNEY—M. Lowenstein and Sons, Inc., installing 100 new looms and adding drawing frames in Limestone Mills.

GREENVILLE—Easterby Motor Co., auto sales and service building, $80,000.

GREENWOOD — Greenwood Cotton Mill and Mathews Mill have merged into one company to be known as Greenwood Mills.

KERSHAW—Spring Cotton Mills, addition to combed broadcloth plant, $500,000.

MYRTLE BEACH—Seacoast Telephone Co., new equipment and improvements to present building.

ORANGEBURG—Hamilton Veneer Co., new plant.

ROCK HILL — Gold-Tex Fabrics Corp., contemplates erection of garment factory adjacent to cotton mill.

SPARTANBURG — Arkwright Mills, plan 300 loom branch on 23 acre site of former Camp Croft.

SPARTANBURG—Coca-Cola Bottling Co., addition to plant, 500 W. Main St., $75,000.

TENNESSEE

CHATTANOOGA — Dixie Mercerizing Co., additions and improvements to Ridgeland and Lupton City plants.

GLEASON — Building Committee, plan public service for use as a garment manufacturing plant, $75,000.

KNOXVILLE—ET and WNC Transportation Lines, plan freight terminal on Middlebrook Pike, $150,000.

KNOXVILLE—Knox Porcelain Co., warehouse, shipping room and addition to main plant, $40,000.

MEMPHIS—Heyden Chemical Co., warehouse addition to local plant, $28,000.

MEMPHIS—Radio Center Building to be occupied by Walgreens and WMPS, $600,000.

NASHVILLE—Harwood Briley and John G. Jefford, food locker and processing plant, Hillsboro Rd., $125,000.

TEXAS

ABILENE—Kraft Foods Co., distributing unit on Albany Rd., and Wichita Valley Railway.

BAYTOWN—Humble Oil and Refining Co., three office buildings.

BEAUMONT—Bethlehem Steel Corp., has acquired Pennsylvania Shipyards, Inc. and will operate the plant as the Beaumont Tex. Yards.

BEAUMONT—Dairy Maid Ice Cream Co., plant and warehouse, Laurel Ave. and Jan St., $50,000.

BIG SPRING—Southwestern Bell Telephone Co., addition to telephone building.

BROWNWOOD—Texas Power and Light Co., plans power plant, $800,000.

BRYAN—City, electric distribution system, $70,000.

BRYAN—Coca-Cola Bottling Co., bottling plant, $250,000.

CORPUS CHRISTI—A. D. Kirby, dry cleaning shop, Kinney St., $27,622.

DALLAS — Central Industries, Inc., office building, Akard and Wood Sts.

DALLAS — Cochran-Houseman, alteration and remodeling present building, 400 N. Akard St., $10,000.

DALLAS—Lone Star Gas Co., renovation to utility building, 1915 Wood St., $14,535.

DALLAS — McFadden, Miller and Smith, office and warehouse building, $32,500.

DALLAS—Murray Co., storage shed addition, $27,500.

DALLAS — Process Engineers, Inc., office building, 5631 Daniels Ave., $40,000.

DALLAS — Treadway Motor Co., addition to building, 232 N. Marsalis, $100,000.

DALLAS—Wall Street Journal, new building, Young and Poydras Sts., to house printing plant and offices.

FREEPORT—Lockwood and Andrews, food freezing and cold storage plant.

HOUSTON — Breitenbach, Inc., warehouse, Lamar and Dallas Sts., $150,000.

HOUSTON — Crown Central Petroleum Corp., service station, Shepherd Drive at W. Duffie St.

HOUSTON—William E. Emerson, remodeling and enlarging meat quarters, 512 Gal... plans cooling plant, entire expansion, $50,0...

HOUSTON—Glazier Frosted Food Co., ... dition, $50,000.

HOUSTON — Houston Belt and Terminal Railway, freight yard on 350 acre tract ... mile north of Southern Pacific Lines Engl... wood Yards, $3,000,000.

HOUSTON—Klein Ice Cream Co., Inc., ... site, Harvey Wilson Drive and Turkey ... future development.

HOUSTON—News, Inc., expansion progra... 7113 Harrisburg Boulevard, $100,000.

HOUSTON — Slats-O-Wood Awning C... Inc., manufacturing plant and office buildi... Lockwood Drive and Sonora St.

HOUSTON—Southwestern Industrial El... tronic Co., laboratory on Post Oak Rd., so... of Westheimer, $40,000.

HOUSTON — Texas-Louisiana Corp., ... quired site for future development.

KENEDY — Industrial Electric Co., el... trical work in plant for Archer-Daniels-Mi... land Co.

McALLEN — Southwestern Bell Telepho... Co., alterations and additions to present te... phone buildings.

NEDERLAND — Southwestern Bell Te... phone Co., Akard and Jackson Sts., office a... exchange building.

PORTLAND—Louie Vobinc, has acqui... site for glass factory, $300,000.

REGAN COUNTY — Witco. Hydrocar...

(Continued on page 55)

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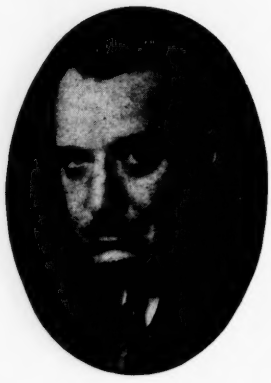


Potomac Soundings

by LAWRENCE SULLIVAN

ABOUT twenty years ago the Federal Government spent a total of $31.-219,000,000 in *two* fiscal years, 1918 and 1919. Those were two war years. They represent the spending peak of World War I. Total spending in the previous fiscal year had been $2,000,000,000, for 1917. After the war, the federal budget was reduced by approximately 70% in one year, the total for the fiscal year 1920 amounting to only $6,500,000,000.

These reflections serve as impressive points of reference in relation to President Truman's new budget for the fiscal year beginning July 1, 1948. The total of that budget is tabulated at $39,671,000,000 as compared with $37,728,000,000 for the current fiscal year ending next June 30.

The increase of $1,943,000,000 for the third fiscal year after the end of hostilities in World War II clearly marks the path we are traveling in federal finances.

However, the situation is more critical than the official budget figures indicate on their face. One item of $2,800,000,000 in foreign aid does not show in the official totals. Several smaller items also are lost in the tabulations, although they are in the President's explanatory text. **Thus, total appropriations recommended for the fiscal year 1949 are not $39,671,000,000 but, in fact, $43,182,000,000.**

New programs recommended in the budget total $9.2-billions, including $6.8-billions for the Marshall Plan. Other new items for 1949 include:

Universal Military Training	$400,000,000
Increased welfare programs	115,000,000
National health insurance	150,000,000
Education subsidy	300,000,000
Surplus property disposal	200,000,000
Post Office deficit	326,000,000
Broadened economic controls	115,000,000

These are the principal new programs recommended in the budget message. Each requires enabling legislation in Congress.

But in addition to the new programs, virtually every recurring item in the budget shows an increase as compared with the previous year, notably—national defense, interest, social security, agriculture and labor. Reductions from 1948 are tabulated for veterans, tax refunds, general government, public housing, and aids to commerce, industry, and finance.

Senator Harry F. Byrd of Virginia was among the first to sound the Congressional alarm against runaway spending. He described the budget as "a dangerous gamble with our national solvency, especially with the continuation of imprudent and wasteful expenditures . . . Unless there is a reduction in federal expenditures, a financial crisis in America such as now exists in England is within the realm of possibility. This would mean world chaos."

Senator Byrd places domestic economy ahead of foreign assistance.

"Fiscal instability here would serve the enemies of democracy far more than any weapon that could be devised. Our financial soundness is the only hope for world stability. Without it, there would be no bulwark against Communism, and freedom could not survive either here or elsewhere in the world."

Government Loans

The latest report from the Byrd Committee discloses to an amazed Congress that we now have no fewer than ninety-three different agencies of the federal government making loans—for one purpose or another—at home and abroad. These ninety-three credit agencies are scattered throughout seventeen different departments or authorities, but nowhere is there any machinery for coordinating or correlating our far-flung banking operations with federal fiscal policies, government income, tax rates, or general conditions in the bond and money markets of the country.

Although Congress now has imposed effective ceilings on most government loan programs (and a few loan agencies are approaching liquidation June 30, 1948), the Byrd report indicates total domestic loans outstanding today at a little more than 86-billions, or about 11 per cent of the total of all such loans made since inception of the several government-aid institutions. Most of our Washington lending agencies were established after 1933, although the Federal Land Banks date back to 1917 and the R. F. C., the pappy of them all, to January 1932.

In addition to its 86-billions in direct loans, the federal government has outstanding domestic guarantees on approximately $7.5-billions in loans to veterans and home owners for various purposes authorized in the G.I. Bill, and the National Home Finance Act.

Government loans outstanding overseas now aggregate $3.4 billions, without taking any account, of course, of the $12-billions nominally due on defaulted World War I loans to the Allies, nor the balances due (also nominally) on the so-called lend-lease settlements of 1946. This

(*Continued on page* 21)

BUDGET FOR 1948 COMPARED WITH 1949

	1948	1949
National defense	$10,746,000,000	$11,025,000,000
International aid	5,533,000,000	7,009,000,000
Veterans	6,632,000,000	6,102,000,000
Interest on debt	5,200,000,000	5,250,000,000
Social security programs	1,960,000,000	2,028,000,000
Tax refunds	2,049,000,000	1,990,000,000
Transportation and communication	1,563,000,000	1,646,000,000
Natural resources	1,179,000,000	1,626,000,000
Congress, courts, departments	1,473,000,000	1,157,000,000
Agriculture	614,000,000	906,000,000
Education and research	77,000,000	387,000,000
Business and finance	372,000,000	190,000,000
Contingent reserves	120,000,000	280,000,000
Labor	97,000,000	117,000,000
Housing	113,000,000	38,000,000
Totals	$37,728,000,000	$39,671,000,000

Potomac Soundings — *by Lawrence Sullivan*

(*Continued from page* 18)

latter figure is represented by another $4-billions, but is hardly to be listed among our live national assets.

This broad picture of foreign lending operations by the fellow who used to be called Uncle Shylock is timely and arresting. The European Reconstruction Program now presents the immediate probability of yet another overseas credit agency's being called to life to administer the re-named Marshall Plan — to start with perhaps $5-billion (for both gifts and loans) for the fiscal year beginning June 30, 1948.

The Committee's report makes no attempt to appraise all these outstanding loans as ultimate off-sets against the $260-billion national debt. That will be the next logical step. Sufficient unto the day is the evil thereof, the Byrd report implies. The mere task of striking a balance sheet on loans and repayments through ninety-three different agencies was indeed an herculean labor. One of these ninety-three agencies, for example, was the Home Owners Loan Corporation, which made 1,017,821 individual loans in its time, took over 198,196 properties on foreclosure, and then wound up with a net loss of $50,620,000, plus administrative expenses for fifteen years—all this on operations which at one time reached a peak of $3.4-billions in outstanding loans.

So hats off once more to Harry Byrd and his indefatigable staff! They are the first folks in history to make their way with a balance sheet through the frenzied finance of the fabulous era of lend and spend.

All that now remains is to figure the cost.

Behind the Oil Shortage

The oil industry of the entire nation is indebted to the Independent Petroleum Association, Tulsa, Okla., for its recent elaborate analysis of the current scarcity of refined products. The shortage is due, in a word, to a five-year shortage of steel products in the oil fields.

"During the war years 1942-45 steel supplies for the domestic oil industry and drilling activity in the U. S. were severely restricted, resulting in a deficiency of 74-million feet of drilling, or 20 per cent, for the four-year period. As a result of this reduced drilling, additions to discovered and developed reserves of petroleum in the U. S. . . . were subnormal to the extent of 3-billion barrels in relation to our increasing oil consumption."

Because of continued tight supplies of steel throughout '46 and '47, virtually no progress was made in catching up on these wartime deficiencies in exploration and development of new wells.

Our domestic oil fields required roughly a million tons of steel products a year before the war—casing, tubing and drill pipe. Wartime metal allocations cut the oil industry to an average of 760,000 tons of steel a year from '42 through '45. The first postwar year, '46, saw a million tons of steel shipped to the oil drillers once more. But by that time our domestic and export demand had hiked crude demand to a level 76 per cent above the prewar normal.

Today's requirements in oil field steel products are 1,450,000 tons a year for the period 1948-51, if we are ever to catch up on our wartime petroleum deficiency.

While the steel industry increased its general tonnage production by 80 per cent between 1935 and 1946, the production of oil field supplies increased only 2 per cent over the decade. Until the oil fields again get their normal proportion of total steel production, the petroleum shortage may continue chronic.

Drillings Fell Off

In recent years, new explorations in the U. S. have added an average of 1.68 barrels to our known oil reserves for every barrel extracted for consumption. But every thousand feet of new drilling requires 11 tons of steel products. And those 11 tons of steel add only 24,000 barrels of oil to our reserves. Hence, when steel was cut down, new drillings fell off in step. This pinch, maintained for four consecutive years, produced today's shortage. In the first two years after the war we barely sustained our increased consumption with new drilling, to say nothing of recovering the wartime loss of more than 3-billion barrels in known reserves.

Russell B. Brown, general counsel of the Independent Petroleum Association of America, has sent a copy of the oil-steel survey to every Member of the House and Senate, with a strong plea that the figures be taken into consideration in connection with the Marshall Plan legislation.

"There have been numerous calculations of the needs of Western Europe, including the needs or desires for oil country tubular goods, but heretofore no official or government agency has undertaken to say anything about the needs of the domestic oil industry," Mr. Brown said.

The first Labor Board order restraining a union boycott was promulgated January 3, in a decision sustaining the Ira A. Watson Specialty Store of Chattanooga, Tenn., against A. F. L. Local 74 of the United Brotherhood of Carpenters and Joiners. The case marks a turning point in federal labor law, for it means that employers now have a court in which they may command labor's compliance with the new industrial relations act. The one-way street of the Wagner Act days is a thing of the past. Any employer who wants to resist lawless labor leadership now has at least a place to present his case.

Attorneys James J. Griffis and Jac Chambliss of Chattanooga represented Watson's Specialty Store in the complaint against the carpenter's boycott. The historic case is docketed as No. 10-cc-1. The Labor Board's findings and recommendations were written by Trial Examiner J. J. Fitzpatrick.

In March, 1947, the carpenter's union placed a picket line in front of Watson's store, declaring that Watson was unfair to organized labor, "although this union did not represent any of Watson's employees."

On August 22, the effective date of the new law, the business agent of Local 74 called the carpenters off work on the residence of George D. Stanley, because several of Watson's non-union installation employees also were engaged on the site—placing linoleum, interior decorations and venetian blinds. This strike, the Board held, was a boycott, in that it sought to induce Stanley to stop doing business with Watson's store.

The carpenters challenged jurisdiction of the Board, on the ground that Watson's was a retail establishment not engaged in interstate commerce. The trial examiner rejected this challenge on the finding that eight per cent of Watson's installations were in neighboring Alabama and Georgia.

When Watson's installation crews arrived at the Stanley residence to lay the linoleum, union carpenters threatened to strike, because Watson had refused to negotiate a closed-shop contract with Local 74. The employer insisted that laying linoleum and hanging venetian blinds was not a carpenter's job. Stanley agreed to have the linoleum crews work at hours when the carpenters were not on the site, principally Saturday afternoons and Sundays. This arrangement prevailed for several days, when Business Agent Jack Henderson appeared personally to order all union men off the job.

"It is therefore found that the strike order . . . caused the union carpenters to strike and to refuse concertedly to continue with their work on the Stanley residence, an object thereof being to require Stanley to cease doing business with Watson, in violation of Section 8 (b) (4) (a) of the Act."

The Board's order required the union to post a public notice in its headquarters that it would not strike further to encourage a boycott against Watson's; and that a copy of such notice be delivered by registered mail to each member of the local.

Union picketing of Watson's store was found legal and proper under the Act, but the secondary boycott was unequivocally in violation of the law.

Peanut Quotas Suspended

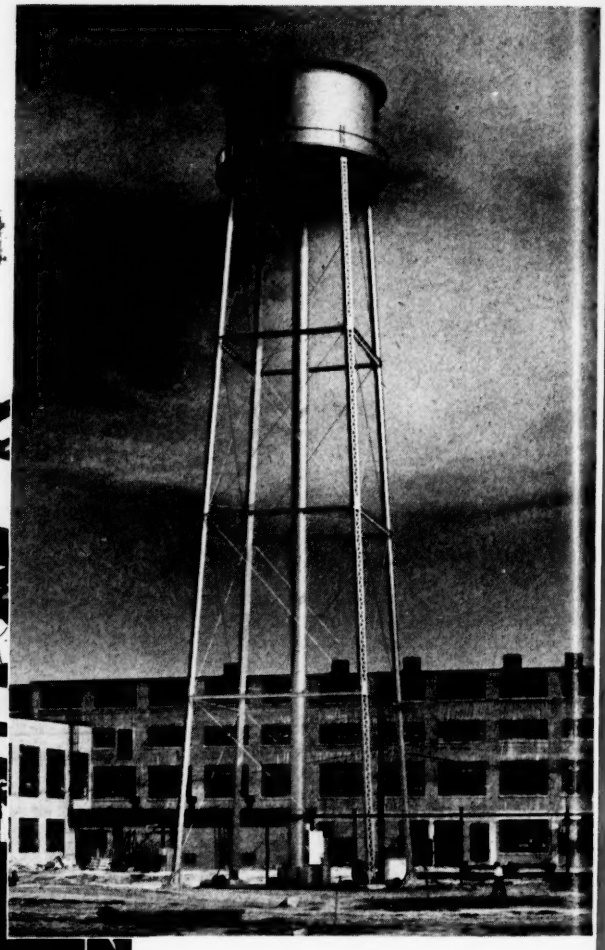
Although peanut growers voted heavily for marketing quotas on the 1948 crop, Agriculture Secretary Anderson announces that no limitations will be imposed on this year's harvest, because of the continuing world shortage of fats and oils.

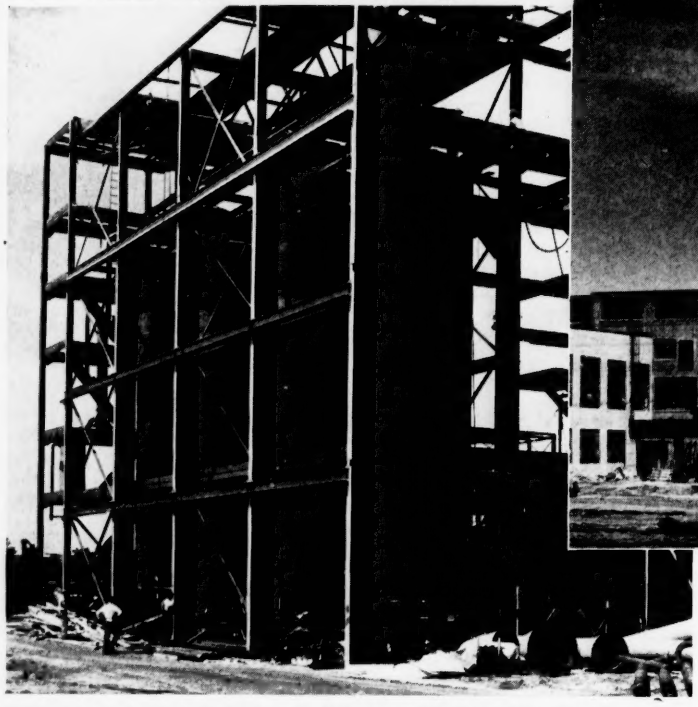
Under the proposed marketing quotas, 1948 production would have been held to approximately 2,359,000 acres, compared with 3,378,000 acres harvested in 1947. This proposed allotment for 1948 would have been some 30 per cent less than the average acreage harvested for the years 1942-46.

On December 9, 1947 producers throughout the South voted 87.7 per cent for quotas and 12.3 per cent against. A total of 105,089 eligible peanut growers voted. The vote was for a three-year quota, which

(*Continued on page* 64)

Steel Plate Structures for A SOUTHERN INDUSTRIAL PLANT





CHICAGO BRIDGE & IRON COMPANY builds many types of steel plate structures for southern industrial plants. For example, we recently built four 10-ft. 9-in. by 43-ft. 4-in. digesters and a 100,000-gal. Horton elevated tank for the Hudson Pulp & Paper Company's new mill in Palatka, Fla. These structures are shown in the two views above. We also fabricated and erected a 12-ft. by 45-ft. barking drum and a 19-ft. by 45-ft. accumulator which were supplied by Fibre Making Processes, Inc. This mill at Palatka has facilities for producing up to 200 tons of high grade kraft, wrapping, gumming and bag paper daily.

Our plant at Birmingham is strategically located to fabricate structures for Southern industries from Southern steel. We install field erected structures with our own experienced field crews. Stress-relieving, x-raying and the supplying of special linings in tanks and pressure vessels are a part of our regular service.

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New York 6	3313—165 Broadway Building	Havana	402 Abreu Building
Cleveland 15	2216 Guildhall Building	Detroit 26	1510 Lafayette Building

Plants in BIRMINGHAM, CHICAGO and GREENVILLE, PENNSYLVANIA

LITTLE GRAINS OF SAND

"Little drops of water, little grains of sand,
Make the mighty ocean, and the pleasant land."

Labor Loafing? Despite the huge investment being made by industry in improved plant and equipment labor productivity has lagged disappointingly since the end of the war. There can be no question that labor could easily lift productivity per man-hour in most industries 10 per cent or more by positive co-operation to achieve this end through suspension of featherbedding and make-work rules inherited from periods of labor surplus and depression, but which constitute an anachronism in an inflationary era.

Rent Control Absurdities. The absurdity and unfairness in the practical application of rent controls is illustrated by a case reported in a west coast city. Here the landlord who lived downstairs in a two-flat dwelling charged his upstairs tenant the $55-a-month ceiling. The tenant moved out—but then bought the place. He moved back into his $55 upstairs quarters and now rents out the downstairs, identical with his own flat, for $150. It's all legal: The lower flat has no ceiling since it was never before rented.

TO COMBAT INFLATION EVERYBODY IS BEING ADVISED BY GOVERNMENT TO SAVE — THAT IS EVERYBODY EXCEPT GOVERNMENT.

Another Trojan Horse. Labor Organizations have made it clear that one of the next steps in their programs will be to obtain old age protection in the form of pension plans for their members. During recent years, large unions would have nothing to do with pension plans. They went after the highest obtainable immediate pay. But the situation is different today. Public opinion is fed up to the neck with inflationary demands for higher wages. Union bosses, sensing this undoubted fact, believe that it will tolerate and even support pension plans under the worn slogan of "security."

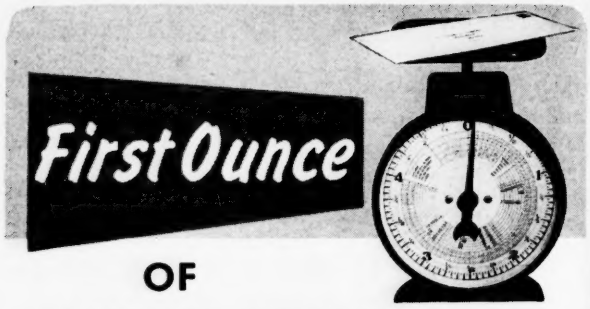
If a company decides to install a pension plan for its union workers then it should be done under terms and conditions whereby the administration of the program is free of union control or domination. Otherwise such a plan, however modestly conceived, will prove a Frankenstein monster. Higher benefit demands shortly will follow, and control of benefit payments will give the union boss a whip hand over his union's members which some union officials, human nature being what it is, will woefully abuse.

Logic Needed. National interest over E.R.P. continues to increase in intensity. Former President Hoover by his proposal for a considerable reduction of its financial provisions and of its original scope has rendered a distinct public service, if for no other reason than by taking the discussion of E.R.P. away from the emotional and placing it on a rational level. Mr. Hoover may be right in his analysis of Western Europe's actual needs but at any rate he subjects the whole plan to orderly reasoning on a practical level. His views will probably be more influential in shaping national and congressional opinion than those of Mr. Baruch whose demand for virtually unlimited control over every phase of the domestic economy, condemnation of any tax reduction and Utopian plans for a government guaranteed market on a world-wide scale will merely prolong and intensify an "emergency." And it might be said that Congress, at this stage of the game could stand a mite of "influencing."

Exit the Excise? Excluding payroll taxes federal per capita tax revenue increased 677% from 1940 to 1947, according to an analysis of the cost of government which has just been completed by the National Industrial Conference Board. The increase in the cost of government since 1939 dwarfs the rise in the cost of food, clothing and other essentials. The cost of operating the Federal Government is met primarily throuh taxes on income, which now provide over three quarters of the federal tax revenue. Excise taxes have been losing their relative position in the federal tax structure, the analysis points out. "In 1940, these levies furnished close to 40% of the tax revenues. Now they supply less than 20%."

The Payoff. Publicly reported cash dividend payments by United States corporations during 1947 totaled $5,174,000,000, or 18 per cent more than the $4,402,300,000 paid out in 1946, the Office of Business Economics, Department of Commerce, said recently. Corporations engaged in mining showed the largest relative increase, with dividends paid in 1947 about half again as much as in 1946. Manufactur-

(*Continued on page* 24)



OF

ANOTHER NEW INDUSTRY

IN THE SOUTHEAST

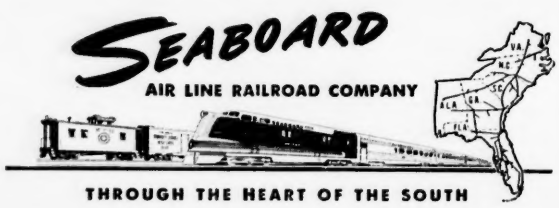
A letter to Seaboard, requesting information on industrial sites in the progressive Southeast, has often been the starting point for utilizing the inherent opportunities of this region—for manufacturing, distribution, and as a fast-growing consumer area in its own right.

Seaboard knows the Southeast which it serves with modern railroad transportation. Along our rails are industrial plant sites suited to various types of industry. Our suggestions for plant locations are in the form of sound, informative surveys detailing such factors as access to raw materials, labor supply, utilities, and facilities for reaching local and national markets.

Your inquiry, held in strict confidence, will bring to your desk specific facts on one or more industrial sites particularly adapted to *your* needs. Please address:

Dallas T. Daily, General Industrial Agent
Seaboard Air Line Railroad Company, Norfolk 10, Va.

SEABOARD
AIR LINE RAILROAD COMPANY



THROUGH THE HEART OF THE SOUTH

LITTLE GRAINS OF SAND

(*Continued from page* 23)

ing corporations increased their dividend payments 24 per cent. Corporations engaged in wholesale and retail trade were up 20 per cent; and heat, light, and power companies paid out in dividends 11 per cent more than in the previous year. However, dividends paid out by railroads and the communications industry were slightly lower in 1947.

Promise Kept. With veterans of World War II now comprising approximately one-quarter of all industrial workers, the pledge made by American manufacturers after V-J Day to employ 3,000,000 veterans and expand job opportunities for ex-servicemen has been met and exceeded. According to the latest government figures, manufacturing industry has provided jobs for almost 3,200,000 former servicemen and women, including many thousands who are physically handicapped and others who are participating in on-the-job training programs.

Carbon Copies? "At the close of 1947, this country alone will have consumed almost as great a tonnage of paper products as the entire world in 1937," is the comment of the editorial writer in the *Paper Industry and Paper World* for December, 1947. He points out: "As we come to the threshold of the new year, the trend is still definitely and continuously upward. Figures for 1947 will show that we are crowding close to the 25,000,000-ton consumption mark—an advance of almost 5,000,000 tons in the past three years. Provided we can get the wood pulp we may conceivably reach the 30,000,000-ton mark in 1950."

Too Much Money. In a recent issue, the *Wall Street Journal* asks itself editorially the question "What is this inflation?" and then (in part) answers: "It is an expanded supply of purchasing power (money and credit) chasing a relatively fixed supply of goods and services. In the present instance there is not generally a 'shortage' of goods except in a relative sense; the per capita consumption of meat, for example, is the highest ever. Today's high prices are due to a surplus of purchasing power.

"There are two ways in which the inflation, that is rising prices, can be checked. The first is to increase our production of goods and services. The second is to check, or even contract, the amount of effective purchasing power chasing the goods we do have. Production already has increased tremendously in most fields. It has failed to 'take up the slack' mainly because the expansion of effective purchasing power has

(*Continued on page* 26)

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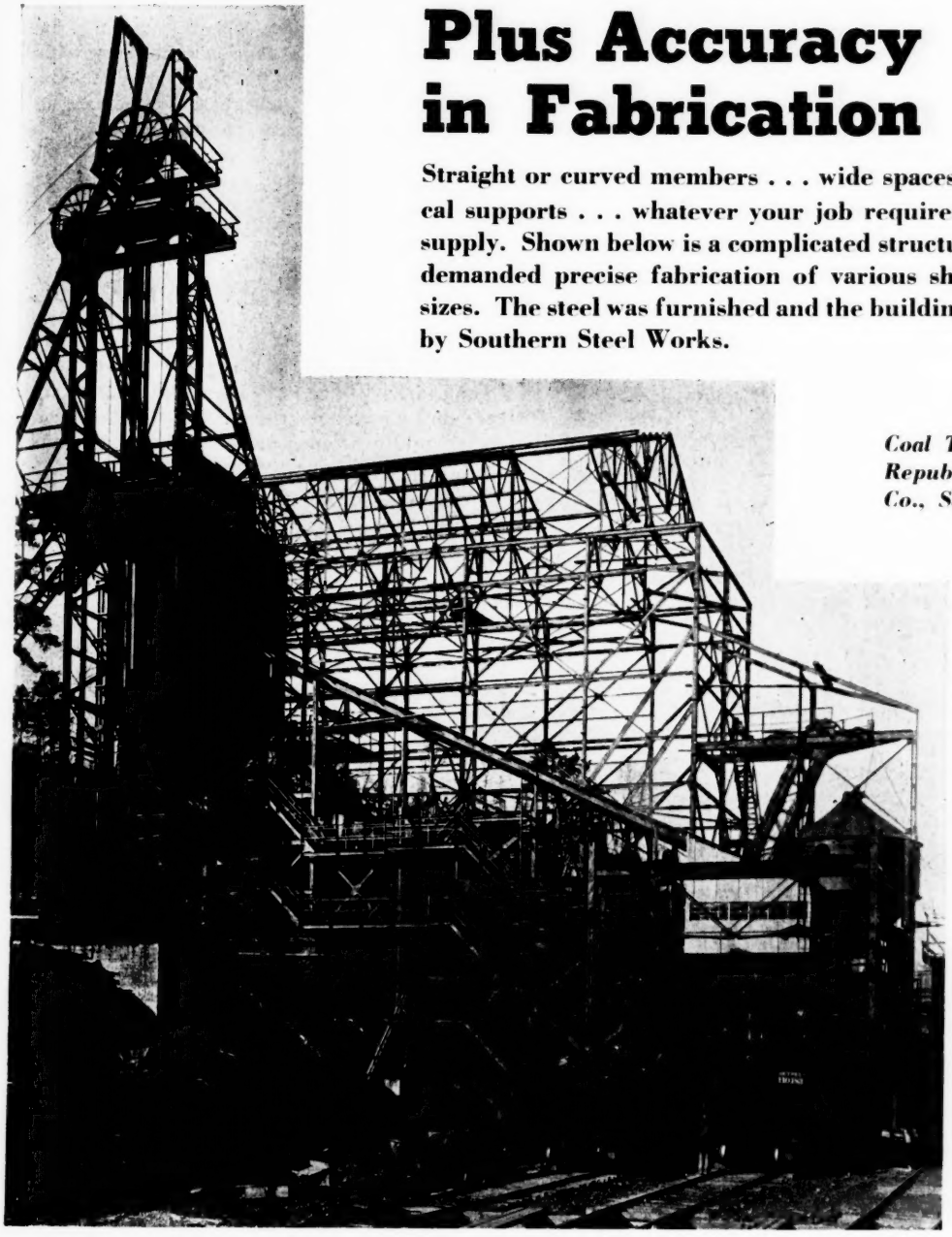
Straight or curved members . . . wide spaces or vertical supports . . . whatever your job requires, we can supply. Shown below is a complicated structure which demanded precise fabrication of various shapes and sizes. The steel was furnished and the building erected by Southern Steel Works.



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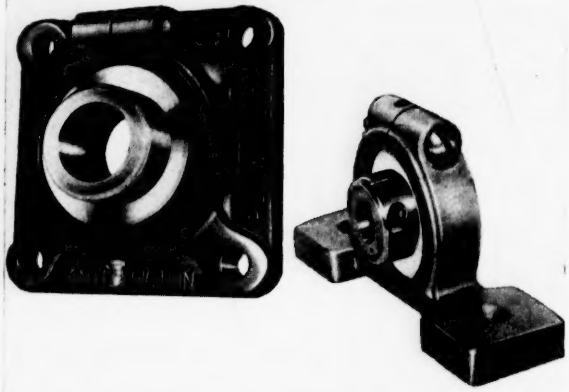

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LITTLE GRAINS OF SAND

(*Continued from page* 24)

been even greater.

"However, production alone cannot solve the immediate 'price problem,' for there are physical limits to its expansion rate. Farmers, for instance, can grow little, if any, more wheat than they are now producing. In fact, production cannot ever solve the problem unless the government stops inflating the supply of purchasing power. A government can always inflate faster than industry and agriculture can make goods. The Government's anti-inflation program, then, ought to be aimed at curtailing artificial purchasing power and, wherever possible, removing obstacles in the way of increased production."

Shelved Again. Housing reform legislation has been shelved in Congress for another year. Volumes of evidence have been accumulated to show how materials shortages, labor practices and outmoded building codes have hampered construction. But lawmakers hesitate to stir up both labor and the industry while housing starts are reaching record proportions. The fact that 1948 is a presidential election year also tends to prevent any action now.

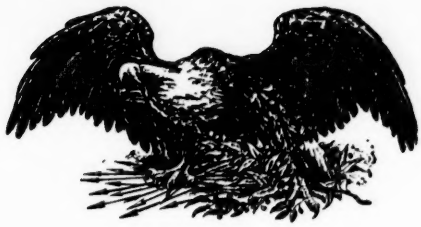
1948 Blue Book Available

With comprehensive data screened, verified, and compiled in traditional *Blue Book* fashion, the *Blue Book of Southern Progress* is now emerging from the presses, preparatory to distribution to the many thousands of Southerners who are interested in the progress of their region.

Official spokesman since the beginning of the century on Southern development and enterprise, the *Blue Book* this year is proud to fill the role of a reporter bringing the most heartening news the Southern industrial world has enjoyed in its many years of successful business achievement; and also to be the harbinger of even greater prosperity for the period lying ahead.

In all its phases, Southern economy can be said to have registered phenomenal advancement since the end of the war. Hundreds of war plants have been converted to active peacetime service; thousands of other establishments, outgrowth of now abundant Southern capital, have been added to those born of the war; ever increasing business ingenuity; and a growing recognition that the South holds opportunities not to be found elsewhere—all these are the prime movers that are pushing the South forward to a leading place in national economy.

The *Blue Book* furnishes detailed evidence of these facts, as well as ground for the conviction that what has already been accomplished is but the beginning



"What Enriches the South Enriches the Nation"

Primarily Political

It is a deplorable fact that almost three years after the fall of Nazi Germany the nations of western Europe are in urgent need of help from the United States. It is also a deplorable fact that our politicians and international statesmen have not seen fit to be frank in telling us why these nations need our help. They have led us to believe that it is due entirely to the devastation caused by war.

As we see it the continuing trouble with western Europe is of its own making. It is primarily political. The economic effects of weak or misguided governments are results of, rather than causes of, governments unable or unwilling to direct national affairs for the good of their own citizenry.

If this is not true, does it not seem strange that in spite of the unbelievable destruction wrought in Germany during the last year of war her factories and her farms were able to support and feed gigantic armies until her home lands were actually taken from her? Why, except for ill conceived and mismanaged occupation policies, can she not do as well now?

Does it not seem strange that when bombs were falling in showers on British industrial centers production was greater in England then than it is now when her energies and all of her manpower can be devoted to the peaceful pursuits of a modern economy? Can it be that the coils of socialism are squeezing the life out of our hitherto indomitable blood brother?

Does it not seem strange that while only a small part of France was ravaged by actual war, and that while her notably thrifty people hungered for freedom through four agonizing years of conquest the government of these now free, proud people should be begging for foreign aid? Is it because she is so torn with factionalism as to be incapable of national unity of purpose and action?

Does it not seem strange that while the plight of the two great victor nations of Western Europe and of Germany is paraded daily before our eyes and dinned into our ears we know next to nothing of the practical steps toward economic well being taken by their smaller neighbors, Belgium, The Netherlands, Norway and Denmark? Surely these nations felt the effects of the invader's heel. Is it possible that their governments are functioning intelligently and efficiently?

Since we believe that the cause of western Europe's continued plight is political, we do not think that dollars will cure it but will simply prolong and possibly intensify it. Bad or bumbling governments must be corrected by their own good citizens. They can not have goodness thrust upon them nor should they expect a good doctor to ease their agonies with narcotics in the mistaken idea that he is effecting a cure. To carry this analogy further, there are diseases like pneumonia which must reach a crisis before recovery can be expected and then attained only when the patient fights for his own life.

The so-called Marshall Plan (what help and how it shall be distributed and administered) is at bottom a protective anti-war or pre-war measure whose primary purpose is the buttressing of tottering governments undermined by the creeping paralysis of socialism as American vanguards against Russian Communism. It is a move in the game of international politics. If its purposes were purely charitable then it should have been designed in such a manner that it could be administered by a philanthropic organization entirely apart from government. Such organizations already exist.

The MANUFACTURERS RECORD is heartily in favor of any necessary humanitarian effort by this country. It is opposed to communism in any of its forms. But it believes that the two objectives should be divorced in our thoughts and examined against a background of reality.

Consumer Chemical Products

The South should still pay even greater attention than it already has paid to establishment of finishing plants. This is well illustrated by the condition that currently prevails in the chemical industry.

The South is a leading chemical producer. Development of this industry in the South has been at a much higher rate than for other sections of the country. Nevertheless, Southern Chemicals are among the few branches of manufacturing enterprise that show a lower figure for gross product value in 1946 than in 1945.

This situation is traceable to the fact that Southern production in this field is made up predominantly of heavy, or semi-processed goods. With the lapse of wartime needs, the demand for these heavier or basic chemicals has been greatly diminished.

But while this decline has been taking place, the demand for *finished* chemicals, largely medicinals and commercial products derived from coal tar and related materials, is rapidly growing. This demand is of both domestic and foreign origin.

At home, retail shelves still yawn in spots allotted to storage of finished chemical goods. Like other consumer goods, there are not enough to go around. Prices for such merchandise are firm and there appears for the foreseeable future no slackening in domestic sales.

Abroad, the actual and potential market is even stronger. Chemical exports in 1946 were at a peacetime peak, but it is estimated that they were still higher for 1947. Foreign demand is especially strong for coal tar products and other medicinal chemicals, in the basic materials of which the South is particularly rich.

German plants that formerly supplied a great portion of the demand of Western Europe for these chemical products are no longer in existence, and America is about the only source equipped to fill the deficit.

Along with medicinals, European demand for dyestuffs is particularly strong. It is estimated that foreign demand for American dyes is ten times greater than before the war. Couple this estimate with the known fact that at present Europeans are able, dollar-wise, to buy less than 75 per cent of their actual needs, and the future potential in this market can be readily appreciated.

The South is in an excellent position to take advantage of the present opportunity for expansion of its finished products chemical industry. The basic materials for them are preeminently Southern in source; the chemical industry in its fundamentals is by no means new to Southern enterprise or to Southern workers; and the South, possessor as it is of a great number of the finest ports in the world, is at an unparalleled point of vantage for going after this lucrative foreign business, and for holding it once it is acquired.

There is apparent an encouraging tendency on the part of Southern chemical operators to switch, at least to some extent, from heavy to consumer chemicals. This tendency has resulted in the development of a number of very valuable commercial products, running most extensively, however, to sprays and agricultural insecticides. This transition is a move in the right direction, but there is a great need and a ready market in the South for these products.

Industrial Progress

Unless one is constantly studying statistics, it is almost impossible to realize the tremendous changes and growth of Southern industry in the brief span of less than a decade.

Though Southerners are pretty well aware of the situation as it pertains to their own state or community, so well aware indeed as to accept it more or less as a matter of course, very few fully grasp the vastness of expansion that has developed the entire South into an industrial empire.

From William R. Lunk, research analyst of Monongahela Power Co., Fairmont, W. Va., one of the best posted economists on West Virginia developments, comes the following inquiry:

"In preparation of the valuable data contained in the *Blue Book* and which we have found most useful, we know you have access to many sources of material. With this in mind, I am wondering if you could give us a comparison between the number of manufacturing plants in 1940 as compared with 1947 . . . There have been claims made that there were more than 400 new manufacturing industries added to the rolls in Tennessee from 1940 to 1945 . . ."

It is possible, not only to confirm the information Mr. Lunk has at hand, but to go considerably beyond it. Tennessee, in the Census of Manufacturers of 1939, is shown to have had at that time 2,289 manufacturing plants of all types. The official count for 1946 was 3,555. This is a growth of 1,266 establishments, considerably above the 400 in the claims made to Mr. Lunk.

Not every manufacturing plant makes the headlines. In fact, some of the outstanding plants of today's South are the outgrowth of enterprise that had originally small public recognition. And all of those 1,200 Tennessee firms certainly are not of mammoth proportions.

Nevertheless, it is only necessary to compare the output of Tennessee manufacturers today with those of 1939 to appreciate that all of those 1,200 companies, as well as those in existence prior to 1939, must be pretty busy, and it is definitely known that a large unmber are of very impressive size.

In order to give greater attention to the number of new plants established in each state since the last census, the *Blue Book of Southern Progress* this year will include prominently a detailed study of the numbers and types of new establishments that go toward making up Southern productive enterprise. The purpose in doing this goes beyond the desire to supply statistical information. It is to point up to Southerners a responsibility as well as a matter of pride. The wheels of those new plants are not going to continue to whir as they now do unless a healthy economic climate is maintained for their existence.

Around The World Report

In his globe-circling voyage the author ventured into strange, remote countries observing the world's turmoil and its desperate needs.

By Frank Gould

President
Manufacturers Record
Publishing Co.

A VISITOR from America to countries of the Far East comes away with the feeling that anything may happen in lands where there is such widespread unrest—unrest that comes from a variety of causes, including the poverty and hunger that are so apparent.

Travelers before have been pestered by the beggars of the East, but it is doubtful if they ever were so numerous as now.

The ship on which I traveled was my home at night, and it was decidedly a haven. Without that return to cleanliness and order and good food, the journey would have left mostly unpleasant memories.

The English crown colonies are the best in their cleanliness and ordered life, but even there, poverty is piteously apparent.

Hong Kong, one of the best of the cities visited, has its fine buildings and parks and boulevards, and yet one could see directly across the street from one of the largest banks a woman with a child strapped to her back washing clothes in a gutter.

Chinese Dilemma

China seemed to be in greater turmoil than other places, with India a close second. Everywhere there is distrust of the ruling government, and a total lack of an American sense of individual freedom. It could hardly be otherwise when the centuries of overlordship to which the vast populations of the East always have been subjected are taken into account.

The withdrawal of the Allies from Shanghai left that city of three or four million people without adequate police protection and in a state of confusion that gives every indication of the top blowing off before long. A hundred thousand Chinese dollars in exchange for one American dollar, which are the figures quoted in the black market, leave little room for any proper sense of values.

Visitors are warned not to be on the streets at night because of absence of police protection and the number of thugs that are loose. Passengers on the ship were told of this, but a few of the bolder spirits wanted the experience of night life in an Eastern city, and they were promptly robbed of their watches before they got to the end of the dock. The Chinese have a deservedly high reputation for nimble fingers. In the ways of peace this is seen in the beautiful needlework their women do, and bank tellers count currency with such bewildering speed it is fascinating to watch them. They rarely make a mistake.

China has gone on and on through the ages. Human life is cheap, but the population constantly grows in spite of famines and floods and pestilence. How they subsist and increase in the primitive life of the interior when food is scarce is a mystery. Questioning of missionaries who for years have lived in remote provinces of China, brought out that they must get away at intervals to rebuild health. On the other hand, the native Chinese, with no sanitary conveniences and food grown and handled under conditions that are revolting to those from more advanced lands, work from daylight to dark, carrying often heavy loads, and produce large families to add to the unnumbered millions of a land whose history outdates antiquity's earliest records.

The shipping situation, insofar as the handling of freight is concerned—and it is somewhat true of passenger traffic—is frequently confused at seaports by orders from Nanking, where rules and regulations are changed overnight.

Strikes threatened and in operation at various ports delay shipping schedules and cause added confusion. Knowing all this it need not cause surprise if embassies and consulates of various foreign countries ask the question of passengers seeking visas for their passports, why they want to go around-the-world at a time of such unrest.

Intelligent, educated Chinese are admirable in many ways, and yet it crops up continually and appears to be a national trait that no agreement of cooperation, no contract—even though the facts and conditions have been agreed upon in advance and are clearly stated—are ever satisfactory unless they add a qualifying clause of some sort. This was repeated to me by various authorities, and it seems it is due to what the Chinese feel is necessary "to save face."

The author, who doesn't take many vacations, last summer decided on a good one. Starting in August and returning in December, he travelled by ship around the world, a distance of 25,000 miles. The Panama Canal, Hawaii, China, Philippine Islands, Malay Straits settlements, Ceylon, Cochin, India, Egypt, and Italy were included in the itinerary. Knowing the folly of trying to judge a country by brief stops at port cities, he sought information from every available source including Anglo-Saxon resident businessmen, officials of government, and native merchants. He knew the value of accuracy and was greatly helped, as he says in his article, by meeting highly-placed natives of the East who were passengers for a few days at a time journeying to other ports. Contacts with them were informing and helpful in checking the correctness of impressions gotten ashore.

East Is East . . .

The world authority on typhoons, an Italian scientist who for many years has made his headquarters in Shanghai, and provides weather reports for the Chinese government, laughed when he told me that none of his reports can go out without some Chinese official adding something to them. Some ludicrous mistakes have occurred as a consequence. A typhoon was hovering close to Korea, but the report that was given out said nothing about Shanghai because no danger was in that direction. This was changed to a warning by the Chinese authorities to the people of Shanghai that they were to get serious effects from the blow in Korea, and it would be well to take the usual precautions of boarding up windows of stores and homes and keeping off the streets. No storm of any kind came to Shanghai at that time; in fact, it turned out to be a perfect day in every respect.

We are discussing in America rent controls, but it is hard to believe that even those who advocate their continuance in the United States would want to go as far as the Chinese landlord is permitted to go when he demands what is known as key money before a tenant can occupy premises he may have been fortunate enough to find. A shipping official had to turn over the equivalent of six thousand American dollars in gold money for the privilege of renting a 6-room house. This key money is not on account of an intended purchase, nor does it lower the rent. If the tenant leaves, the key money is gone. On the other hand, the landlord cannot raise his rent without permission of the authorities who base his price on what is allowed for other property of the same size and location. The "key" sum varies and frequently goes as high as $10,000 in gold for the occupancy of a comparatively modest home.

In the last few days riots started in

(*Continued on page* 34)

Around The World Report

(*Continued from page* 33)

Canton and spread to Hong Kong and Shanghai. It may be expected that there will be confusion among dense populations, underfed and ignorant, but the present mistrust of government is something to be thought about before we send over money from the United States and put it in the wrong hands.

The impressions that were made were confirmed by Anglo-Saxon residents of Chinese cities who have been in the East many years and I had the further advantage of contact with new arrivals on the ship at various ports taking the place of those who disembarked.

Darkness Over India

In lesser degree the same situation, although manifested somewhat differently, obtains in India. Inflation is there, but not so marked as in China, but the religious wars, following withdrawal of the British from Pakistan, have created serious concern as to what the future may hold. It is estimated that four million people from Pakistan alone will embark for what they regard as safer harborage in Hindustan, now to be known as India.

The slaughter of Hindus by Moslems has been appallingly great, and the same thing may be said of the Hindus in their attacks upon the Moslems. Settlement of this fanatical warfare has been taken up by the United Nations and a committee appointed to investigate and suggest the terms of peace. The representatives of both Pakistan and India have agreed to this.

At night in the beautiful city of Bombay, refugees by the tens of thousands are sleeping on the sidewalks with their little salvaged bundles at their side, and no other place to lay their head. Foot passengers must take to the middle of the street. A short walk—even in this city of great charm—a block or two from the main boulevards and business districts, brings one to the huddled stores and homes of a vast population stretching for miles in every direction, and there are seen the evidences of poverty and confusion.

Men high in positions of trust in India were quick enough to say not to send money to improve conditions, and for the same reason offered in China. They believe their people would like to be shown the know-how of American industry so that lucrative employment could be made available to a greater number of workers.

India is a country of vast resources—resources of minerals, timber and raw materials, and we are making use of these in our own industrial life—but the field for numerous private projects is almost unlimited.

America cannot overlook its responsibilities. In this age of air travel we have seen lands that are far away brought close to us, and in our program of endeavoring to bring peace to the world we face a grave job. Outside of the waste that will come about if money is given to wrong hands and spent without direction on our part, it won't accomplish the good intended and will leave us much poorer than before.

A suggestion was made that a ship be chartered and Congress sent around the world, at government expense, to see things at first hand. Undoubtedly it would save billions to the people of America. While probably not feasible, if we could only get half of the membership to go it would pay in future legislation and a course of action based on knowledge. It would be essential, if such a plan could be worked out, to see to it that these representatives of ours keep away from the potentates of foreign lands who are, in most cases, wily politicians concerned mainly in promoting their own interests.

It is a fact that the sixty some Congressmen who went to the East in 1947, are virtually a unit in their refusal to go along with unwise spending.

Communists have had a lot to do with the confusion throughout the world. They are infiltrating all through the East addressing groups of people whenever they can get an audience, and placing signs on fences and boardings in countries where the people vote.

This was particularly noticeable in Italy, and according to officials of the United States government who are familiar with conditions in the north of Africa from the Atlantic to the Red Sea, they have been very active there.

An overland journey by motor was made from Naples north to Genoa. It was intended to go on to Marseille, but that French port was closed by the Communists who would not permit freight to be loaded or unloaded.

Italian Scene

Italy seemed more prosperous than previous reports would have led one to believe. Her agriculture west of the Appenines along the entire journey from south to north was in excellent condition. Olive groves and vineyards which cover the valleys and hillsides were in excellent shape. The Appian Way which was traversed for a good part of the journey is a fine highway and repair gangs were seeing that it is kept that way.

In Rome, Florence and other cities, hotels are doing a good business, and restaurants are crowded. This was particularly noticable in Rome. Coal is short and as a consequence there is not all the heat in hotels that one would desire, but no special fault could be found with the food, which, while not great in variety, was sufficient and nourishing. The people themselves appeared well fed and busy.

Travelers further East in Italy did not give such encouraging reports of conditions. These could not be verified except by taking a longer journey which time did not permit. Certainly the active port of Genoa, where the harbor had ships from all parts of the world loading and unloading, and streets crowded with hurrying, cheerful people, gave little indication of stark realities that were so pronounced in other countries.

The general picture, as I said at the outset, is a confusing one, and yet certain facts stand out clearly.

The American Task

America, by reason of its wealth and mighty productive power, has become a leader among nations. These nations require our help whether by giving or lending money, or showing the way to production, so that they may become self-supporting. The grave question confronting us is how far can we go in distributing money without running the risk of wrecking our own economy. But beyond that we must know the money given or loaned is serving the purpose for which it is intended, and that heretofore has not always been the case. The sums too have been, in some instances, very large. It is admitted by those who have studied the problem at close range that the countries that are in distress, and this applies to Europe as well as the East, will only succeed as they become self-supporting through a sustained agricultural and industrial enterprise.

Money alone will not solve the problem, and particularly so if its distribution is not supervised by our representatives giving their whole time to that purpose. The difficulties must be recognized, and it will not be easy to instill in people who, today and for centuries past, have had no outlook, nor spirit, that claims recognition of the individual man.

The unrest throughout the world was marked even before the first World War. It was not especially noticed here because either we were satisfied with our own affairs, or it sprang up almost overnight. It spread rapidly through many lands and the reason has been cause for wonder because of its onrush like that of a prairie fire.

Was it due and does it continue because of the underfeeding of great populations? That is the theory held by some. Certainly a well fed body is more likely to produce a better, more stable brain than that possessed by men half starved.

Promises of Utopia advanced by Communists appeal to those who have no outlook. Such fields have proven fertile for Communist agitators.

So we come back to the land of the free where the Statue of Liberty, as it always does, puts a lump in our throats. The weather-beaten pilots on the bridge bring the great ship through the mists of New York harbor in the early morning through congested water traffic, and without raising their voices and with no sound save a shrill whistle once in a while to the accompanying tugs, place her alongside the dock without a scratch on her paint. Here is evidence of American efficiency. Within a few moments stevedores quietly and promptly start removing cargo, and the traveler contrasts all of this with the hubbub and the yells, the arms that are waved, and the delays which are experienced in other ports on the other side of the world, and he thanks God for America.

Cost Accounting Facts and Fantasies - II

By
Paul T. Norton, Jr.
Associate Editor

THE first article in this series, published in the January issue, included certain general observations about cost accounting and also a discussion of several actual situations where an uncritical acceptance of cost accounting figures produced impressions that were far from correct, and even resulted in actions that were obviously incorrect.

This article will give two additional examples where the failure of top management to think problems through to their final conclusion nearly resulted in disastrous cost accounting methods, although better methods were readily available. In addition, examples will be given which illustrate difficulties in charging direct material and direct labor.

The company of this example manufactured an extensive line of equipment. Many of the items were made to fit the special requirements of the users, but as far as possible were assembled from standard parts which were made on stock orders in advance of the receipt of orders for the finished equipment.

Quantity Production

This not only made it possible to ship equipment more quickly than would have been the case if it had been necessary to manufacture it completely, but in addition enabled this manufacturer to have the advantages of quantity production of the standardized parts. These standardized parts, by the way, were the ones generally sold as repairs, another very good reason for manufacturing them in advance of sale and for carrying them in stock, ready either to be assembled into new equipment or to be sold separately as repairs. It should be obvious that the cost of the cost accounting system itself was increased greatly by the fact that each of these parts had to be costed separately.

Because of the great variety in the types of equipment manufactured, this company operated many different production departments. The actual indirect overhead expense rates differed greatly between departments and even between various operations in the same department. As explained last month, it is often necessary to compromise between accuracy and expense by selecting the cost accounting system which seems to give reasonably accurate distribution of indirect overhead expense together with the smallest possible amount of complication and expense for the cost accounting system itself.

In spite of the fact that it was recognized that costs so determined would sometimes be rather inaccurate, this company decided that the best method of distribution was one based on a percentage of direct labor, with a separate rate determined for each department, but the same rate used throughout any single department no matter what the operation might be.

From the viewpoint of expense distribution, the machine shop was probably the most important department, both because it was a large department with the greatest total indirect overhead expense and also because such a large percentage of the standard parts made on stock orders in advance of sale or assembly were produced in the machine shop. Until quite recently the inaccuracies in expense distribution were probably not as great as one might expect because the quantities involved in the production

Paul T. Norton, Jr.

of these parts were too small to justify replacing the general purpose machine tools with more modern high production machine tools.

However, in recent years, the quantities of certain of these parts increased to the point where modern machine tools became economical; in fact, it became necessary to install modern machine tools for these parts in order to meet competition. Several modern, high-speed machine tools, using carbide tools, were therefore installed in the machine shop.

More Production

On the average, these machine tools produced at least four times as many pieces per hour as had been the case with the machine tools used previously. The direct labor rate increased slightly and the actual indirect overhead expense rate per hour increased considerably, but the actual cost per piece was much less than before, because of the great increase in the rate of production.

The increase in the total indirect overhead expense was calculated in the regular way and the expense rate (percentage of direct labor) for the machine shop was increased in the way which had become more or less standard, and which had probably been as good a way as could have been used under the former conditions.

No one in the accounting department realized that this method of expense distribution increased the apparent cost of all products of the older machine tools, whose cost was not really affected at all by the new machine tools, while it reduced the apparent cost of the products of the new machine tools to values considerably below the actual costs which, as stated earlier, were much less than before even when correctly figured.

Fortunately, the top management of this company was close enough to things of this sort to insure that any costs developed for products by means of radical changes in methods of operation would be examined carefully to see if the expected savings really were being obtained.

Faulty Method

When the cost for the first stock order made on one of the new machine tools was analyzed it became evident to the general manager that something was wrong in the method that was being used for the distribution of indirect overhead expense. (As was the case in the second example last month, this point should really have been considered by top management at the time the decision was made to install the modern machine tools.)

The man in charge of the general books and the man in charge of cost and inventory records were asked to get together and to suggest a way to charge costs to the products of the new machines that would give reasonably accurate costs without too much additional expense or confusion in the machine shop itself and in the cost accounting department.

These two men could think of only two solutions. One was to change to the machine hour method of expense distribution for all work done in the machine shop. The other was to make a new department for the new machine tools, and to calculate a separate expense rate (percentage of direct labor) for the new department. Top management vetoed the first suggestion as being too different from the method used in other departments, and as being unnecessarily complicated. The suggestion that a new department be set up to include only the few new machine tools was quickly abandoned even by the two men who had made the suggestion when it became quite evident that there were many serious objections to any such solution of the problem.

It was finally suggested by one of the top executives that the problem might be solved by making a surcharge for each

(*Continued on page* 36)

Cost Accounting Facts And Fantasies— II

(*Continued from page* 35)

hour that each of the new machine tools was used, a sort of machine rate for these few machine tools which was to be added to the regular distribution by percentage of direct labor.

This rather unorthodox method has now been used for some time and seems to be a completely satisfactory method. There are so few of the new machine tools that it is a simple matter for the timekeeper in the machine shop to mark the time tickets with the number of each of these particular machine tools and in addition there is a distinctive rubber stamp for all of the time tickets for any of the machine tools for which the surcharge is to be added.

Finally, the products made on the new machine tools are so different from the other products of the machine shop that the man in charge of cost accounting can easily check a stock order to see if there should be a surcharge. As all cost sheets show hours, it is a simple matter to determine the amount of the surcharge when one is to be added.

Depreciation Distribution Example

Some 25 years ago two companies in the same city, but with their plants several miles apart, were merged into a single company. All departments doing the same sort of work in both plants were consolidated at one plant or the other, but for various reasons it was not possible to dispose of the smaller plant and to concentrate all of the operations of the company in the larger of the two plants.

Quite recently, after all but a single large department had been moved from the smaller plant, this smaller plant was sold and all of the operations of the company were finally concentrated in the larger plant. In moving the one remaining department to the larger plant it became necessary to build a large new building and to make some other adjustments of a very minor nature in the space occupied by several of the other departments.

At the beginning of the first year in which all departments of the company were in full operation in the one plant, it was decided to continue the previous method of charging depreciation on buildings for the departments that had previously been located at the larger plant, namely, on the basis of floor area in each department. It was also decided to apply an arbitrary dollar amount of depreciation on buildings for the single department that had been moved, until it could be determined how the depreciation on buildings for that department could best be made a part of the total depreciation on buildings for the entire plant.

One reason for postponing the final decision on this point was the fact that the basis for depreciation for the new building could not be determined definitely until it was decided whether the sale of part of the smaller plant had been an "involuntary conversion," because the particular sale had been made to a railroad under threat of condemnation.

Toward the end of the year in question it was finally agreed by the company and the Treasury Department that no part of the sale had been an "involuntary conversion." This, of course, increased considerably both the basis for depreciation and the annual depreciation on the new building which was being used by the department which had been moved from the smaller plant. The proper entries were made on the general books, but somewhat as in the case of the example previously cited in this article, the top management of this company had failed to realize that there was a special problem involved in deciding how this additional depreciation should be distributed among the various departments.

In spite of the fact that all of this additional depreciation should reasonably have been charged to the department that had been moved to the larger plant, the reader will probably not be surprised to learn that the accounting department did exactly the opposite. It charged all of the additional depreciation to the departments that had previously been at this plant. The arbitrary dollar amount was continued for the department which had been moved.

It is obvious that top management cannot expect members of accounting departments to handle things of this sort correctly unless top management does a much better job than was done in this case in explaining to the accounting department the reasons for charging the department which had been moved with depreciation on buildings on an arbitrary dollar basis until a certain dispute with the Treasury Department had been settled.

Forewarning

It would certainly have been better if the man in charge of the accounting function had at least been warned that no change in the distribution of depreciation on buildings should be made until the entire matter had been discussed with top management. Fortunately, in this particular case the treasurer of the company was interested enough in knowing the amount of the new depreciation charge to cause him to ask for this information immediately after the distribution had been made. The error was thus located and corrected before any use had been made of the incorrect distribution, but is is certainly not safe practice to rely on any such haphazard methods of locating and correcting errors.

The errors in the two examples given last month and in the two given thus far in this article have all been related in some way to some sort of indirect expense. The next example illustrates how the direct material charged to an order can be in error, and the final example does the same for direct labor.

A certain manufacturing company found it economical to purchase a large part of its lumber from operators of nearby saw mills, who trucked the lumber to the factory. Because of the rather low quality and the rather poor grading, the percentage of waste varied considerably among the various lots which were taken into the plant for machining. These variations were all taken care of in the price paid for the truck loads of lumber which were purchased, but they did make it rather difficult to decide how much rough lumber would be required to cut a specific order.

Rough lumber was piled in the lumber yard in such a way that it could be identified and charged off the ledger by amount and price classification. It was customary for the man in charge of the lumber yard to estimate how much lumber would be required for each order and for him to send that amount into the plant. As might be expected, on the average, the tendency was to send in more lumber than was needed rather than less. As no lumber was sent back to the lumber yard when there was more than was needed, lumber gradually accumulated at the cut-off saw.

Periodically, this was eliminated by reducing the amount of lumber brought in for a job—and therefore charged to that job by the cost accounting department. In a few cases there might even be enough lumber at the cut-off saw to make it unnecessary to bring in any lumber for a certain job, in which case no lumber would be charged to that job at all.

Muddled Picture

Space does not permit the detailed explanation of the reasons why it was generally impossible to determine, after an entire shop order had been completed, just how far the situation just mentioned had caused the amount of lumber charged to the order to vary from the amount actually used on that particular order. Suffice it to say that after several years had elasped and several changes had taken place in the personnel of the operating and accounting departments no one had a clear picture of what was being done and its full significance. It was only when a certain product showed very erratic tendencies in lumber costs that it became clear to everyone that little reliance could be placed on the lumber costs shown by the cost accounting records.

After the matter had been given full consideration by everyone concerned it became apparent that it would not pay to make the rather extensive changes that would be necessary in order to make sure that just the right amount of lumber was charged to each job. The variations in the lumber piled in the lumber yard were so great, both with regard to price and quality, that there was no possibility of making satisfactory comparisons between the lumber costs of successive lots of the same product no matter how accurately the amount of lumber was

(*Continued on page* 57)

Creative Effort— Key To Balanced Economy

No region dependent upon outside technical and creative thinking can gain its rightful share of prosperity

By Raymond B. Seymour

Industrial Research Institute
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The industrial progress which has taken place in the South during the past decade exceeds the progress made during the preceding half century. The value of manufactured products and the value added by manufacture have increased by over 100 per cent and the per capita income has increased 250 per cent. Some of this progress has been stimulated by financial interests within the region, but much has been catalyzed by outside capital. Ten years ago, less than two-thirds of the productive capacity of Southern industry was controlled outside the region, but today it is estimated that 85-90 per cent is so controlled. Less than 30 per cent of Southern factories are branch plants but they account for over 70 per cent of all industrial production in the region. However, the geographical location of the controlling interests is of minor importance if the region's creative activity and its industrial activity are in a state of balance. A study of data on creative activity during the past ten years will show that this vital phase of industrial activity has not kept pace with other phases of industrial progress in the South.

(*Continued on page 56*)

WHEN raw materials are processed into finished products at the local source the progress made is more desirable than merely that which is measured by the wealth which may come from the exploitation of natural resources.

But when this processing of raw materials at the source into finished products is made possible through local enterprise and through the results of native creative effort then the progress attained assumes magnificent proportions.

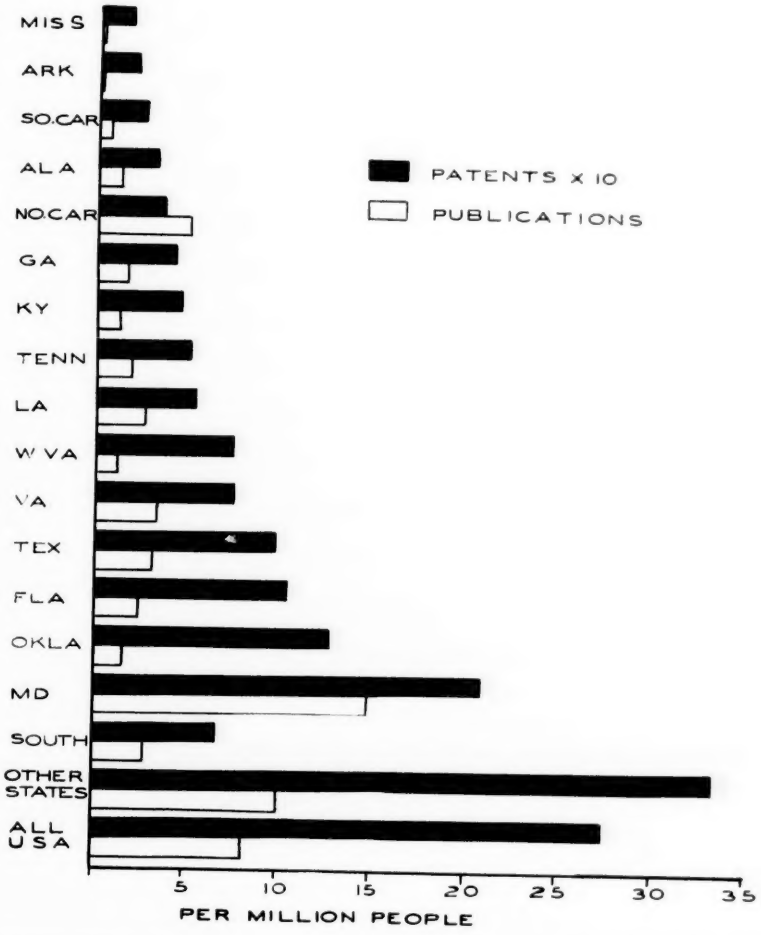
Enlightened industrial and civic leaders are becoming convinced of the advantages of converting their raw materials to finished goods, since the increase in industrial activity is obvious, but these same leaders have failed to realize that such an economy is unstable if it is not supported by native creative effort.

Providing investment capital is available, improvements in industrial activity may result from the creation of new or the duplication and relocation of old industries. Newly created industries are generally located where they are developed but if transportation of materials proves uneconomical, the plant may be more strategically located while the creative and top managerial talent remain in the original location. Duplication may take place in a period of rising economy and the soundness of the endeavor will be determined by the relative location of raw materials and markets and the ingenuity of managerial and technical talent.

The main factors influencing the relocation of an industry are cost of power and transportation, quality and quantity of skilled and unskilled labor, location of markets and raw materials and tax rates. Relocated plants are usually branch factories in which few technical or top salaried personnel are employed.

Each type of industrial activity outlined makes an entirely different contribution to the progress of the community in which it is located, yet these differences are not apparent in ordinary data on industrial activity. Wage earners are essential to industrial progress in a region but if industry is dependent on outside management and technology, that region can never attain its rightful share of prosperity or leadership.

The absence of native creative effort can cause far more devastation to a region's economy than all external discriminatory acts. Complete decentralization of any industry is to be encouraged but the decentralization of labor activities coupled with centralization of creative and managerial talent is not desirable to the area in which the industry is located.



Patents and Technical Publications for Southern States. Indices obtained are as follows: Patents per year for 1940-6 multiplied by 100,000 and divided by the population. Publications per year for 1937-1947 multiplied by 1,000,000 and divided by the population.

As an operational problem, materials handling is only partially solved but machinery is reducing costs.

No Apologies For Materials Handling

Materials Handling Does Increase Value of the Product Says the Author in a Staunch Defense of the Art

By Sidney Reibel
Materials Handling Consultant
Albert Kahn, Inc.

UNTIL very recently, materials handling men have had to sell their product to industry. They have had to plead with owners to buy their equipment, to make savings which, in some cases, have been as high as 100% per month on the investment. Today, it is different. National surveys show that everywhere, in every industrial and commercial activity, all are aware that tremendous savings can be made by improving the handling of materials.

So, it is time for materials handling men to get off their knees, to quit pleading and apologizing, to stand firmly erect, to pound the hair on their chests and roar out their message as a challenge to those it will benefit. They must no longer back into their argument with apologetic statements (purely unfounded) in the belief that such are necessary to get a client's attention.

I don't want to read any more materials handling articles, or turn on my hearing aid to listen to another talk, in which appears the following statement: "Materials handling adds nothing to the value of the article handled." This is erroneous and misleading.

Now isn't that a fine way to try to convince anyone that he will benefit from a materials handling program? Yet the praise of materials handling is often introduced by that statement. I hesitate to repeat the calumny, because casual readers may think I believe it, whereas it makes me see red and want to cry aloud, "It's not true, and I can prove it."

Let's take a simple example: Unmined coal is not fuel—just useless black stone. Even after the miner breaks it loose, it is not useful fuel as long as it stays in the mine. But, haul it to the surface, ship it to power plant, mill or home, and it is fuel. Materials handling worked this transformation, adding the value which turned black stone into available fuel. And that is true of a refrigerator, or any other industrial product: it is useless in the factory, and, to become valuable, must be moved to the ultimate user.

Of course, there is a germ of literal truth in the statement. In the same way, it could be said that factory walls and floors and roof, the heating, the plumbing and the water supply, etc., do not add to the value of the factory product. They don't add anything, directly. But we all know that it is just as important to have a plant as it is to have the machines it houses.

Materials handling is almost a new business science, said John F. Johannsen, in articles which appeared in the November and December issues of the RECORD. "Not so," says Sidney Reibel, in quick rebuttal. "I don't want to read any more materials handling articles, or hear the statement that materials handling adds nothing to the value of the article handled." In the accompanying article, Mr. Reibel, who is a materials handling consultant for Albert Kahn Associated Architects and Engineers, Inc., establishes his position that materials handling is an art, made so by widespread engineering research.

Also, we have to move a part, in the process of manufacture, from one machine to the other—otherwise, the manufacturing process will stop. Every one of these things is necessary in order to transform raw material into more valuable finished stock. None can be omitted. Therefore, each contributes its share of additional value to the article.

We try to keep down the cost of all of these items: the size and cost of the plant, the number and cost of machines and tools, the work done on the parts, the amount of spoilage and scrap, the handling of materials. When any of these costs is reduced, the value of the product is increased.

Now, materials handling is just taking stuff from here to there. Just like the coal in the ground, or the refrigerator in the factory, or the unfinished part, the stuff is useless here until it has been moved there. That movement has changed a useless article into something useful — it has added value to the article.

I was moved to make these remarks and observations by a paper on "Materials Handling" which appeared in the November and December, 1947, issues of MANUFACTURERS RECORD. The paper, by Mr. John F. Johannsen, gives a very able presentation of the advantages of unit loading, of analyzing methods and costs and of analyzing handling operations. It is unfortunate that he felt it necessary to introduce his subject by a series of remarkable and unfounded statements. He may not have realized how very harmful and incorrect they are, and how damaging an impression they can make on his readers.

In order to scotch these statements, and in justice to the very fine work which has been done by the materials handling industry and its engineers, I have under

taken to answer them in detail. The foregoing is the answer to one statement (which Mr. Johannsen made in a different form). Others which he made are the following:

1. "Materials handling is one of the few operational problems yet to be *partially* solved by top management groups. . . . almost nothing has been done about it."

"Production men . . . do not know how to effect a complete materials handling program."

"Engineers can design fine handling equipment and tools. Engineers have not programmed the use of them."

2. "This (materials handling) problem is without the benefit of actual operational cost figures and *completely devoid* of the benefits of engineering advice and study."

3. "No one knows very much about materials handling."

"There are no materials handling engineers worthy of the title. . . . "

4. ". . . it is only in recent years that any serious attempt has been made to solve the (materials handling) problem."

"Modern materials handling methods are comparatively recent developments and have gained considerable prominence only during the recent war."

It is evident from the manner in which these statements are incorporated in his paper that Mr. Johannsen meant them to apply to the entire materials handling industry. However, he is identified with the fork truck business, and the balance of his paper gives specific data and recommendations which apply only to the "unit load . . . fork truck-pallet" systems.

There is, of course, much, much more to materials handling than fork trucks, pallets and unit loads and their application to the extremely important field of warehousing, packing and shipping. For every ton handled there, two or more tons are handled elsewhere several times—as raw materials in the mines, quarries, fields and forests, as raw stock in the mills, and as material in the process of manufacture toward the goal of a finished product. The other materials handling devices which he barely mentions—conveyors, cranes, hoists, trucks, spouts and other devices—do 90% of the handling of materials in places other than warehouses. Also, where powered trucks with lift features have been developed, mostly in the last 35 years, the other forms of modern materials handling devices got their start back in the 1870's and 80's, or earlier. Unless the latter are considered in a review of the progress and present state of materials handling, the picture will be very incomplete.

Author's Rebuttal

The following numbered remarks are answers to Mr. Johannsen's statements of corresponding number:

1. Materials handling problems will never be entirely solved, any more than any other industrial and manufacturing problems. But, the auto and body plants, appliance factories, the mines, mills, foundries, power plants and many other industries would not agree that they "have not even *partially* solved their materials handling problems." Also, top management does not solve such problems; they initiate programs for their solution. The work is done by production men who most certainly have to know how to put into effect the complete materials handling programs which are in use in such vast numbers in industry today.

As Mr. Johannsen states, we have designed and developed very fine equipment. And it *has* been programmed into effective use for many years. There are countless examples to prove it, evident to anyone who cares to look around. One is the new Chevrolet assembly plant at Flint, Michigan, where mechanization of materials handling has been put into effect to a very high degree. There are too many others, in all branches of industry, to try to list them here.

2. The costs of handling materials have been very definitely established in many plants. Expenditures for materials handling equipment can hardly be justified to reduce costs which are not known. The importance of exact cost figures can be over-emphasized. We are not concerned with bookkeeping, but with savings whose total can run into hundreds or thousands of dollars. A few pennies, one way or the other, do not matter.

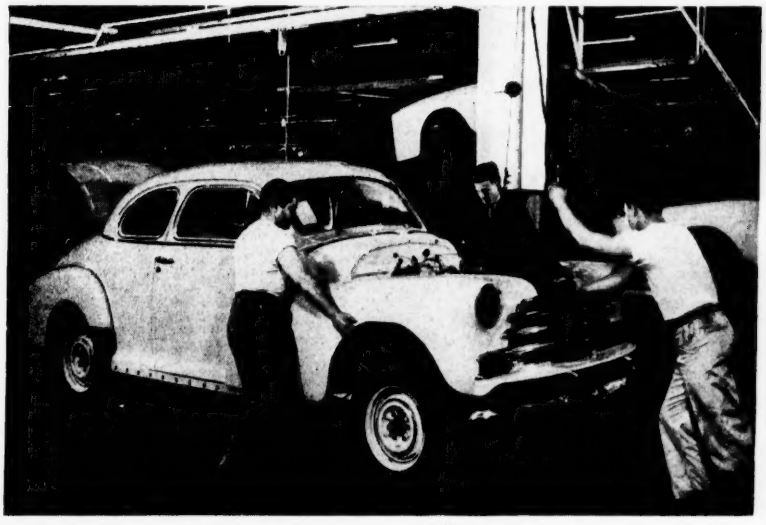
The claim is often made that materials handling is an indirect cost, as though that were something reprehensible. Whether it is direct or indirect is not a measure of its importance. It merely means that, in the first instance, a cost occurs only when an item is processed. The indirect cost is an expense which does not stop, but continues whether a factory operates or not. Assuming that my definitions are correct, materials handling labor is a direct expense, the equipment charge is indirect expense. But each can be, and is determined in any plant with a workable system for determining costs.

For the materials handling problem to be "completely devoid of engineering advice and study" would, if true, be a major handicap if not a calamity. It is not hard for any of us to think of at least one outfit which is profiting by engineering advice and study. Some can think of several, and materials handling men know of thousands. Additional answers to this statement are included in the balance of my remarks.

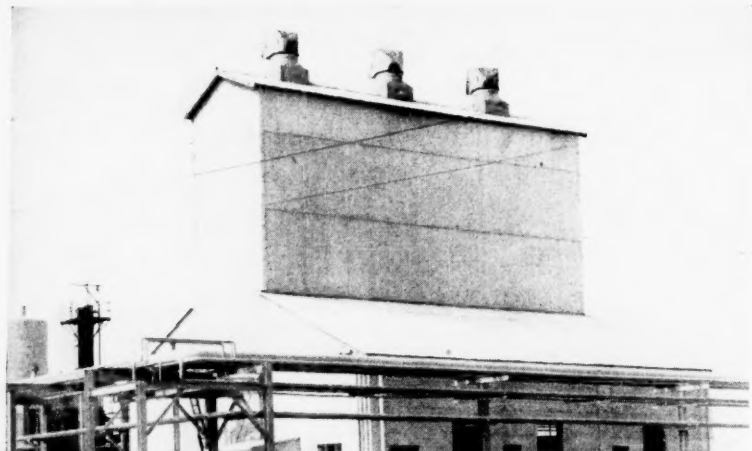
3. Materials handling now covers many fields, each of which has special types of equipment. They include bulk handling, package handling, parts handling, assembly, packing, warehousing and shipping equipment. There are special requirements in industries such as coal mining and preparation, canning and bottling, rubber tire manufacture, etc. Just as there are specialists in medicine, there are specialists in one or more of these branches of materials handling, whose knowledge of their specialty is specific and complete. To say that a cancer specialist does not know very much about medicine would be absurd. Equally absurd is to say that the materials handling specialists do not know very much about their own line. They are the materials handling engineers not one of whom . . . "is worthy of the title." Maybe the author of that phrase does not know any, but there are a number of these engineers who know a lot about more than one branch of this work, and with whom I am acquainted. This has been proven by their accomplishments. They not only are worthy of the title, but are nationally recognized as outstanding materials handling engineers.

4. In an article in December, 1947 in *Distribution Age*, Mr. Matthew W. Potts, well known Materials Handling Consultant, tells about Materials Handling Pioneers. He mentions Oliver

(*Continued on page* 60)



Costs of handling materials, above, is definitely established in many plants. Machinery to cut costs resulted from wide engineering study.



The Shell Corporation's new general laboratory at Dear Park near Houston is pictured above. Design was by Carl A. Mulvey, Houston architect.

Southern Construction Value Reaches $174,091,000 Total for January

SOUTHERN construction got off to a favorable start in January with a value of $174,091,000 for contracts awarded, or 24 per cent ahead of the total for the same month of last year, according to a compilation of individual items reported in the DAILY CONSTRUCTION BULLETIN.

The current January total was to some extent an initial confirmation of predictions that 1948 construction would rise above values of last year. It is about 5 per cent larger than the 1947 monthly average, although it represents a decrease from the 1947 peak total of December.

Public building leads the field so far this year. The total for such work is $63,300,000, of which $35,466,000 is for schools and the balance for government structures including hospitals. At this time last year, public building was next to last among the five categories of southern construction.

Private building ranked second. The $32,821,000 total, however, was pressed closely by the $32,018,000 for roads, streets and bridges. As in past months, residential construction comprised the largest proportion of the private building total.

Value of southern residential construction in January was $22,650,000. Assembly buildings, a classification embracing churches, theatres and auditoriums, amounted to $4,115,000; office type buildings, $3,169,000, and commercial building projects, including stores and restaurants, $2,887,000.

Industrial construction was valued at $25,401,000. This figure was below the $27,130,000 for industrial contracts of December, as well as under the $32,717,000 monthly average for last year. The comparable figure for January of 1947 was $66,029,000.

Engineering construction during the current January aggregated $20,551,000. Including $14,278,000 for dams, drainage, earthwork and airports, and $5,463,000 for sewer and water work, the figure compares favorably with the $24,714,000 for similar work in 1947's first month, although it represents less than one-half of the $59,041,000 of December.

January's $174,091,000 value on southern construction is exceptionally high for the first month. In fact, at no time during the period since 1930 has the valuation risen to that level. The nearest approach was in January of 1942, a first month when the value was placed at $165,330,000.

The years of 1941 and 1943 also recorded encouraging values in their first months. For January of 1941, the figure was $141,717,000; for January of 1943 the value was $132,979,000. The only first month figure above the hundred million dollar mark before the war occurred in 1936; the two after the war were in 1946 and 1947, this latter January showing a total of $139,831,000.

The favorable possibilities for 1948 are emphasized by the fact that its first month saw a higher value of construction than that for the year when the all-time peak for southern construction was recorded. That was the twelve-month period of 1942, the first actual war year, when the value of southern contracts totaled $8,877,848,000.

Rise Indicated

With the firmness of value exhibited in its first month, southern construction this year may well account for its usual substantial share of the activity forecast for the country as an entirety. A twenty per cent rise is indicated. If applied to last year's southern construction value, this would mean a two billion to two and one-half billion dollar total for 1948.

Several factors bear directly on the construction situation. These are clearly stated by J. W. Follin, assistant administrator of the Federal Works Agency, who puts it this way: "Are additional manpower and materials available and will high prices operate as a brake on increased volume?" His answer to the question is:

"The supply of materials necessary for the 1948 volume of construction should be available, generally speaking. Inventories should be more abundant on the dealers' shelves, a factor which should enable the shortening of building time, and this will make for greater efficiency through the improved continuity of work put in place at the site.

"True, there may be spot shortages of some materials. Items such as gypsum lath, pipe, or nails may not be available at all times at all places. However, an improvement in the supply of these products should be anticipated.

"While there may be shortages of skilled workers at a particular site, the increased volume of construction forecast

SOUTH'S CONSTRUCTION BY STATES

	January, 1948 Contracts Awarded	Contracts to be Awarded	Contracts Awarded January 1947
Alabama	$ 9,852,000	$ 8,570,000	$ 5,991,000
Arkansas	1,691,000	9,765,000	732,000
Dist. of Col.	7,060,000	1,905,000	4,027,000
Florida	10,721,000	60,584,000	7,318,000
Georgia	5,906,000	12,120,000	51,131,000
Kentucky	1,986,000	6,804,000	92,000
Louisiana	23,378,000	20,309,000	8,296,000
Maryland	9,534,000	21,016,000	7,009,000
Mississippi	9,272,000	9,000,000	16,354,000
Missouri	8,332,000	8,894,000	676,000
N. Carolina	8,013,000	12,636,000	3,887,000
Oklahoma	7,261,000	21,260,000	3,911,000
S. Carolina	2,964,000	39,160,000	2,205,000
Tennessee	2,665,000	52,192,000	1,638,000
Texas	53,613,000	77,186,000	21,353,000
Virginia	5,843,000	73,451,000	2,723,000
W. Virginia	6,000,000	22,910,000	2,488,000
TOTAL	$174,091,000	$457,762,000	$139,831,000

should not call for an equal increase in the number of workers. Increased productivity may be expected through the greater availability of materials, less time should be wasted in waiting for materials to be delivered and a greater number of more experienced apprentices should be working on the site.

"The imagination and ingenuity of contractors in devising and using more effective methods can also contribute to improved efficiency. In a full employment economy, it may be difficult to add appreciably to the labor force. Therefore, a shortage of skilled workers may be a greater bar to a higher construction volume than any lack of materials."

These elements, Mr. Follin believes, "lead to the belief that in combination, any particular construction cost increases in 1948 over the level of 1947 might well be avoided." However, he points to several other factors, one being "the implementation of the Marshall Plan," commenting that if steel is to be allocated, it may be difficult to do all proposed domestic heavy construction.

The Federal Works Agency prediction for private construction is $10,000,000,000, a figure based on that body's interpretation of construction trends and the forecasts of other public agencies and private organizations. New housing construction is estimated "only moderately above the likely 1947 dollar value."

Commercial construction is expected to experience an uptrend, while the course of industrial construction is seen turning downward. The reason advanced for this is that the backlog of industrial building previously started and remaining to be put in place has been heavily reduced by the large volume of such work in 1946 and 1947.

Public construction volume forecast by the Federal Works Agency is estimated at about $3,700,000,000, or approximately twenty-five per cent greater than last year. Construction financed by Federal funds could account for $1,355,000,000; state and locally financed expenditures would move upward to about $2,345,000 is the opinion of its officials.

These, with the $10,000,000,000 private building prediction, would total $13,700,000,000, or about six to nine per cent higher than the 1947 dollar volume. The January value of southern construction supports the forecast so far, by being five per cent above the monthly average for southern contracts last year.

The Building Products Institute, in effect, confirmed the Follin statement, when it issued the announced saying that while there may be an insufficient supply of some materials, including certain steel and metal products owing to the requirements of the foreign aid program and transportation difficulties, the list of shortages would be smaller than at any time since the war.

However, that private agency stressed the new plant capacity scheduled to come into operation in 1948 and expressed the opinion that the total supply of available materials will show a substantial gain. One of these new plants is a factory at Baltimore where the annual output of gypsum lath is placed at 190,000,000 feet.

Selig Manufacturing Company's new $1,000,000 chair factory, shown above in artist's conception, is presently under construction at Monroe, La.

Not much improvement has been evident in balancing the supply of steel against the demand, despite the highest production rate for several years. Capacity is now nearly three million tons above what it was a year ago. Difficulties are in shortage of pig iron, fuel oil, scrap and coke. Diversion of steel to Europe is a complicating factor, from the consumers' viewpoint.

The Commerce Department's prediction for construction throughout the country this year is around $15,000,000,000. Officials of that branch of the Federal government say building material production and inventories at present levels seem adequate to support an annual construction activity of that level. "It appears improbable," they assert, "that production of several materials currently reported in tight supply nationally (chiefly lumber, gypsum board, wire nails and certain iron and steel items) can be expanded rapidly enough in the near future to permit a volume of construction activity much above $15,000,000,000 in 1948."

Nail manufacturers, however, are optimistic about the supply of their product this year to the point that there will be no shortage of housing nails. Production is predicted at 18,000,000 kegs, or 2,000,000 more than last year. One of the spokesmen for the industry stated that construction of a million homes in 1948 would require about 200,000 tons, or one quarter of the output last year.

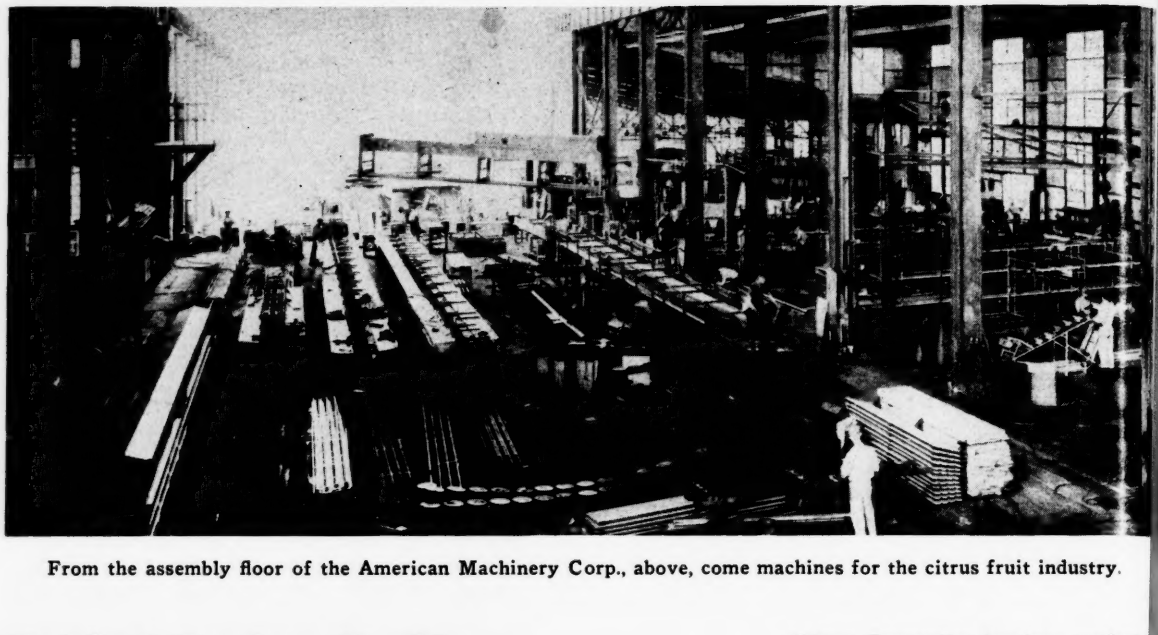
An industry engineered house continues to be advanced by the Producers' Council as the best opportunity for reducing the cost of home building. The procedure is based on modular coordination, which means coordination of the dimensions of the materials so they can be used with a minimum of costly cutting and fitting at the construction site. Principles of the plan are applicable to homes of any size, but are said to bring the greatest savings to the small builder in erection of small homes.

How costs of the various types of highway construction have risen since 1940 was revealed by Thomas H. MacDonald, public roads commissioner. He said they are up from 180 to 193 per cent, in a review of the accomplishments on the nation's highways last year, when improvements proceeded at a pace faster than in the previous year. He places the value of work authorized by the states at $895,000,000 on 44,700 miles of road. Federal aid projects included cost $640,000,000 on 19,800 miles.

At the year's end, Mr. MacDonald stated, Federal aid projects costing more than $700,000,000 were under construction. Plans had been approved for additional projects costing around $350,000,000, on which work is expected to start this year. Total estimated cost of Federal aid projects on the program but not yet advanced beyond the planning stage was near $750,000,000.

SOUTH'S CONSTRUCTION BY TYPES

	January, 1948 Contracts Awarded	January, 1948 Contracts to be Awarded	Contracts Awarded January 1947
PRIVATE BUILDING			
Assembly (Churches, Theatres, Auditoriums, Fraternal)	$ 4,115,000	$ 9,525,000	$ 439,000
Commercial (Stores, Restaurants, Filling Stations, Garages)	2,887,000	10,347,000	4,055,000
Residential (Apartments, Hotels, Dwellings)	22,650,000	61,978,000	12,854,000
Office	3,169,000	3,510,000	3,234,000
	$ 32,821,000	$ 85,360,000	$ 20,582,000
INDUSTRIAL	$ 25,101,000	$123,350,000	$ 66,029,000
PUBLIC BUILDING	$ 27,834,000	$ 59,100,000	$ 10,021,000
City, County, State, Federal and Hospitals	.....	.....	.....
Schools	35,466,000	35,629,000	6,047,000
	$ 63,300,000	$ 94,729,000	$ 16,071,000
ENGINEERING	$ 14,278,000	$ 73,116,000	$ 22,336,000
Dams, Drainage, Earthwork, Airports	810,000	17,377,000	.....
Federal, County, Municipal Electric	5,463,000	16,949,000	2,378,000
	$ 20,551,000	$107,442,000	$ 24,714,000
Sewers and Waterworks	$ 32,018,000	$ 46,881,000	$ 12,435,000
ROADS, STREETS & BRIDGES			
TOTAL	$174,091,000	$457,762,000	$139,831,000



From the assembly floor of the American Machinery Corp., above, come machines for the citrus fruit industry.

Finished Product Machinery For The Citrus Fruit Industry

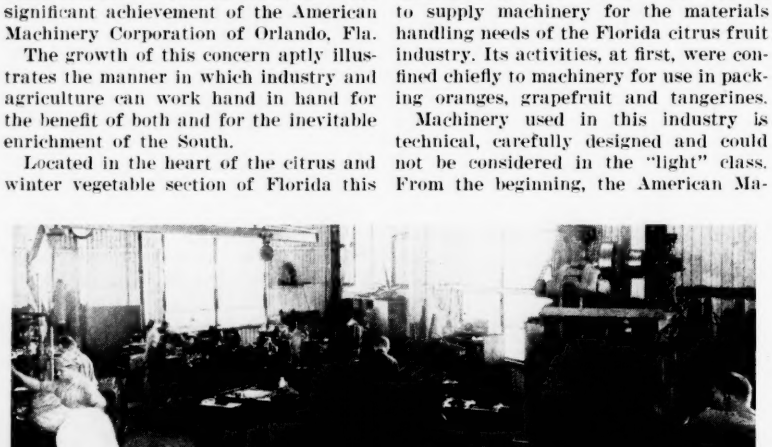
MACHINERY, designed to fit the needs of the citrus fruit industry, and manufactured in Florida factories is the significant achievement of the American Machinery Corporation of Orlando, Fla.

The growth of this concern aptly illustrates the manner in which industry and agriculture can work hand in hand for the benefit of both and for the inevitable enrichment of the South.

Located in the heart of the citrus and winter vegetable section of Florida this corporation was organized in 1936 as an outgrowth of the American Fruit Machinery Corporation which was founded to supply machinery for the materials handling needs of the Florida citrus fruit industry. Its activities, at first, were confined chiefly to machinery for use in packing oranges, grapefruit and tangerines.

Machinery used in this industry is technical, carefully designed and could not be considered in the "light" class. From the beginning, the American Machinery Corporation has been producing machinery that can properly be classed as "heavy" and vital to a healthy agricultural economy.

The food processing machinery manufactured by the company now embraces much more than that used in the citrus industry. In addition to complete citrus packing equipment, it includes machinery for canning citrus products and other fruits and vegetables, vegetable packing units and dehydration machinery for converting the refuse from canning plants into cattle feed.



Above is a corner of the machine shop where the highly technical, carefully designed machines are turned out. Thorough research and experimentation eventually produced machines that fitted the exact needs of the citrus industry.

Need For Machines

But to understand this growth it is necessary to know something of the recent history of the food industry, particularly that portion of it which is engaged in producing machinery for canners and packers.

Packers and shippers of produce which is distributed on a national scale require machinery that would assure uniform packing, proper cleaning, shrinkage control processes, and other features which provide for delivery of the produce in sound condition with minimum expense and loss to the growers, packers, shippers, brokers and retailers.

In the citrus industry, a vast amount of research and experimentation was conducted to develop the exact types of machinery that would prove most beneficial to the industry.

The results of those efforts can be seen today in the modern citrus plants and also in retail stores where sound, healthful fruits are displayed. The machinery which made this possible—developed for the citrus industry—has been an important factor in the growth and welfare of the agricultural giant. Factories producing the machinery have made important contributions to Florida's industrial growth

Since a greater portion of the country east of the Mississippi looks to Florida for its supply of winter vegetables, it was natural that Florida packers and shippers should seek new methods of preventing shrinkage and wilting of their products while in transit and in the grocers' bins.

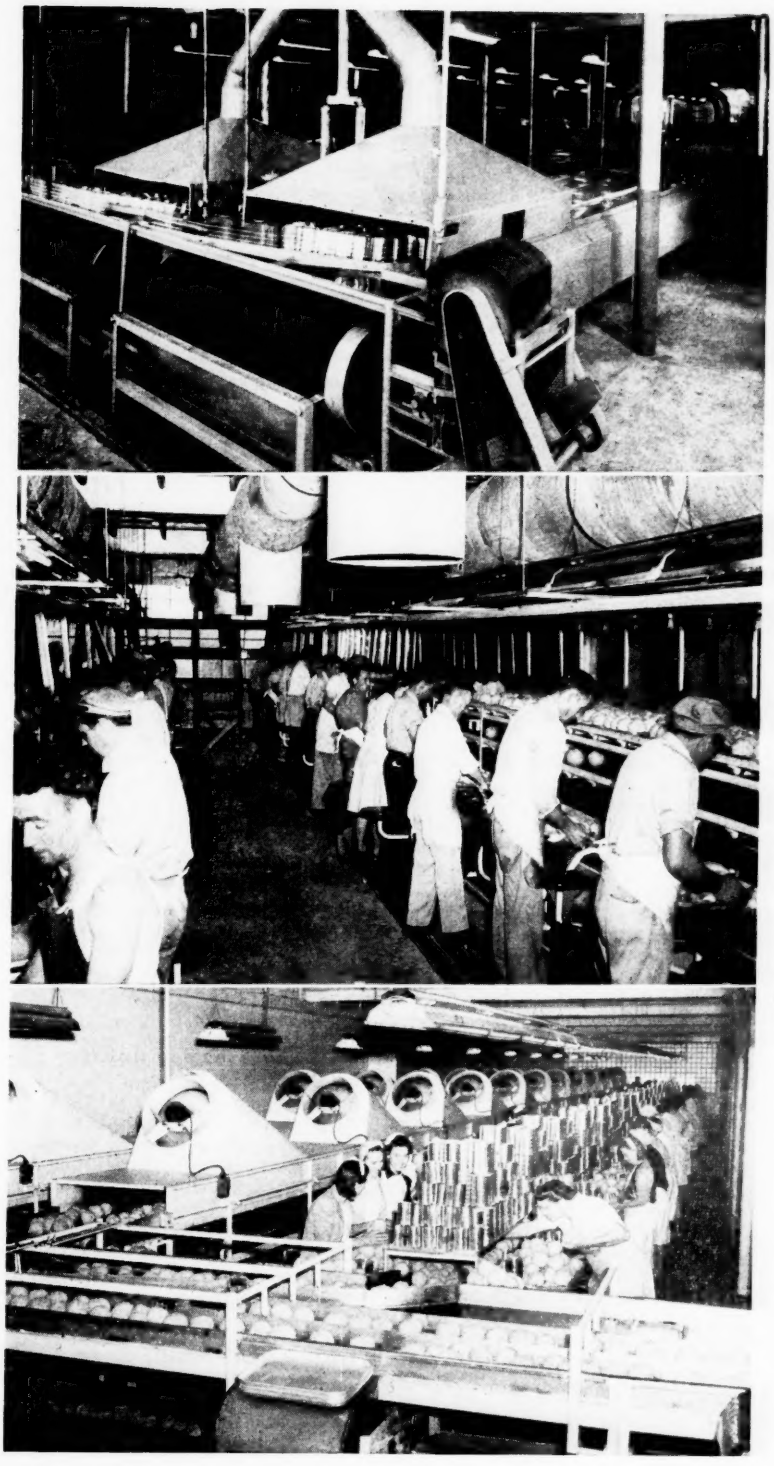
Not only did Florida's huge vegetable industry give the American Machinery Corporation a large market for the sale of its machinery, but also it provided a wide diversification of vegetables for study and research. It is doubtful that any other locality in the country could provide such ideal conditions for the development of vegetable processing equipment and the Machinery Corporation worked closely with Florida vegetable growers and packers in developing its vegetable packing machinery.

The demand for machinery for the processing of vegetables has increased heavily in the past few years. Factors responsible for this are: the Minimum Wage Law forced packers to seek labor saving machinery; the manpower shortage during the war focused additional attention upon the automatic equipment; housewives are more critical of the quality of the vegetables they buy and people throughout the country demand fresh vegetables all year consequently causing packers to adopt processing methods which lengthen the keeping qualities and improve the appearance of produce which is shipped long distances; the competition which is being offered or at least which is threatened, by frozen foods and improved canned goods has caused packers of fresh vegetables to improve their products.

The canning industry has also made tremendous advances in recent years. While the industry was faced with a serious labor shortage, the demands of the Armed Forces of the United Nations required a substantially increased output of canned food products. This combination forced the adoption of more fully automatic machinery of higher capacity.

Research in food canning has also shown more desirable methods of retaining the vitamin content, flavor and appetizing appearance of canned products. The development of machinery to meet the requirements of these discoveries on a commercial scale is constantly underway by the manufacturers of food processing machinery. It is largely to them, these manufacturers of equipment, that the industry looks for improvement of its processes. Improved canning processes are also playing an important part in relieving market gluts with disastrous prices during harvest seasons. The canning of surpluses not only provides food for year round use—it also furnishes growers with a dependable market.

Significantly, both the machinery corporation and the citrus fruit industry are indebted—one to the other—for respective progress. More important, that machinery needed by the canning and packaging plants was developed by factories, close at hand, working in close cooperation with users to eventually produce that machinery most helpful in the handling of materials.



Top: Grapefruit sections move swiftly, on modern machinery into the coolers of a citrus plant. Materials are handled easier, production increased.

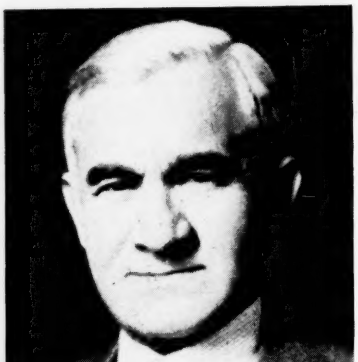
Center: In a Florida sectionizing plant, production men remove the yellow outside peel from grapefruit. Ease of production, again, raises output.

Bottom: Rubber belts carry peeled grapefruit through cooling tunnels, then to sectionizing table. Market demands require swift material handling units.

Southerners At Work

Newport News Official Announces Retirement

Announcement has been made by the Newport News Shipbuilding and Dry Dock Co., Newport News, Va., of the retirement of Homer L. Ferguson as an executive official of the company as of January 1, 1948. He will continue



Homer L. Ferguson

as a member of the board of directors, and retain his position on the executive committee.

As a result of the retirement, John B. Woodward, president and general manager, has become the company's chief executive officer.

William E. Blewett, Jr., executive vice president, was elected to the board of directors effective January 1.

Mr. Ferguson has seen long and distinguished service with the Newport News company. A graduate of the United States Naval Academy, class of 1892, and of the University of Glasgow, 1895, he practiced as a naval architect in various sections of the country before coming to Newport News in 1902. With the exception of a few months in 1904 and early 1905, when he was connected with the Bureau of Construction and Repair in Washington, D. C., Mr. Ferguson has a record of continuous service with the Newport News firm. Under his management, the great success of the company was attained. He developed the undertaking in many ways, and the wisdom of his policy with respect to those who worked with and for him is borne out by the fact that the company has never experienced any labor difficulties or strikes as we know them today.

He is responsible for the establishment of the company training school wherein men are trained for higher positions, and whereby it is possible to periodically judge an employee's progress and then take steps that will be most beneficial to all concerned. It was Mr. Ferguson's idea that established at Newport News the company's own shops for the manufacture of various materials necessary in ship construction.

It is well for the company that he will continue in an advisory capacity as chairman of the board. His vision and ability have encompassed the hectic years of war, and the changes in products that peacetime has made neecessary. It may be expected that despite his years of slightly more than three score and ten, his spirit of youth and activity will remain undimmed by time.

E. S. Williams Named President, Chairman By Western Maryland

Announcement has been made of the election of Eugene S. Williams, formerly vice president and general counsel of the Western Maryland Railway Co., as president and chairman of the board. He assumed office on January 1.

Mr. Williams has been a railroader for the past twenty-five years. Born in Romney, W. Va. in 1892, he began his railroad career in 1923 when he joined the law department of the Western Maryland.

He held numerous posts in this department, and in 1934 he became head of it as general counsel. He was elected a vice president in 1935, and held these two positions until the first of this year.

He served in the armed forces in both world wars, the first time as an artilleryman, and most recently as an intelligence officer attached to the eighth air force in the European Theatre.

Mr. Williams is a graduate of the University of Virginia, and is vice president of its Alumni Board of Managers.

R. E. Ebert Named Director of Charlotte Bank

The Board of Governors of the Federal Reserve System recently announced the appointment of Mr. R. E. Ebert of Greenville, S. C., as a director of the Charlotte Branch of the Federal Reserve Bank of Richmond for a three-year term beginning January 1, 1948. Mr. Ebert is president of the Dixie Home Stores, Inc., of Greenville, S. C.

Commercial Credit Corp. Names Edward J. Hamilton

Edward J. Hamilton, a native of Baltimore, has been promoted to Vice President and Manager of the Baltimore Division of Commercial Credit Corporation. Mr. Hamilton, who joined the staff of the national finance corporation in 1917, comes back to Baltimore from Dallas, Texas, where he was Assistant Manager of the Dallas Division.

Mr. Hamilton succeeds Robert A. Coxeter, who has been transferred from the local post to the Managership of the firm's Division in Detroit, Michigan.

Dr. Charles Allen Thomas Honored by Chemists

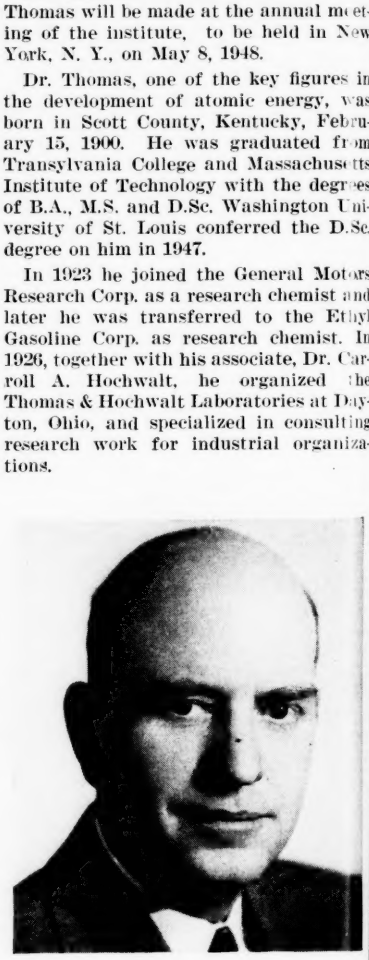
Dr. Charles Allen Thomas, executive vice president and technical director of Monsanto Chemical Co., St. Louis, Mo., has been unanimously selected to receive the 1948 gold medal of The American Institute of Chemists.

Dr. Foster D. Snell, president of the Institute, stated that the award is made in recognition, not only of Dr. Thomas' work in the development of atomic energy and his leadership in research, particularly in synthetic resins, but also for his administrative ability and his encouragement of basic research.

Presentation of the medal to Dr. Thomas will be made at the annual meeting of the institute, to be held in New York, N. Y., on May 8, 1948.

Dr. Thomas, one of the key figures in the development of atomic energy, was born in Scott County, Kentucky, February 15, 1900. He was graduated from Transylvania College and Massachusetts Institute of Technology with the degrees of B.A., M.S. and D.Sc. Washington University of St. Louis conferred the D.Sc. degree on him in 1947.

In 1923 he joined the General Motors Research Corp. as a research chemist and later he was transferred to the Ethyl Gasoline Corp. as research chemist. In 1926, together with his associate, Dr. Carroll A. Hochwalt, he organized the Thomas & Hochwalt Laboratories at Dayton, Ohio, and specialized in consulting research work for industrial organizations.



Dr. Charles A. Thomas

In 1936 the laboratories were acquired by Monsanto Chemical Co., and Dr. Thomas became central research director of the company. He was made a director of the company in 1942.

In 1945 Dr. Thomas became vice president and technical director of Monsanto

and a member of its four-man executive committee. On May 27, 1947, he was elected executive vice president.

During World War II he was one of the principal scientists in the development of the atomic bomb, having had charge of the final purification and metallurgy of plutonium, the 94th element.

Public Relations Institute Honors Fred F. Murray

The Public Relations Institute of Texas conferred the top award for industry public relations achievement in Texas during 1947 on Fred F. Murray, chairman of the Oil Industry's Public Relations Committee in the Gulf-Southwest, and president of the Oil Well Supply Co. of Dallas.

Mr. Murray also heads the Gulf-Southwest district committee which is carrying out the oil industry's public relations program in the states of Alabama, Mississippi, Louisiana, Arkansas, Texas and New Mexico.

Finney, Industrial Manager Dallas Chamber of Commerce

Thomas Weld Finney has assumed his duties as the newly appointed manager of the industrial department for the Dallas Chamber of Commerce. Mr. Finney, who formerly served the Tulsa Chamber of Commerce in a similar capacity, succeeds Andrew W. DeShong, who recently joined the industrial advisory staff of the Republic National Bank in Dallas. Mr. DeShong will be manager of the new industrial service division of the bank's business development department.

A native of Hamilton, Ohio, Mr. Finney joined the Tulsa chamber in July, 1940, as manager of the industrial and

Thomas W. Finney

oil departments. He entered the Army Air Forces in March, 1942, and after his discharge, three years later, he served for a while as Eastern industrial representative for the Tulsa chamber. He later returned to Oklahoma as industrial manager.

Before going with the Tulsa chamber, Mr. Finney served successively with the Calco Division of American Cyanamid Co., as trust administrator for the corporate trust department of the Bankers Trust Co. of New York City, and as instructor in the college of business administration in the University of Arkansas. He holds a Master's Degree from the Graduate School of Business Administration of Harvard University. Mr. Finney is a member of the Industrial Advisory Council to the industrial division of the Oklahoma Planning and Resources Board.

Oscar Monrad Resigns Okla. Chamber Post To Join Bank

Mr. Oscar Monrad who, for the past four years, has been manager of the Industrial Division of the Oklahoma City Chamber of Commerce has resigned his position with the chamber and joined the First National Bank and Trust Co., of Oklahoma City as vice president in charge of public relations and industrial development work.

Mr. Monrad has been outstanding in the Middle West for his industrial work, and last summer was sales manager of the Oklahoma Industrial Tour which carried exhibits of Oklahoma industry to eastern cities.

He is serving as Industrial Consultant to Governor Roy J. Turner, and is a member of the advisory committee, Oklahoma Planning and Resources Board and of the newly formed Industrial Mobilization Committee.

National Research Council Names Maryland Scientists

Three distinguished Baltimore scientists have been named to the Committee on Human Reproduction of the National Research Council, which has begun the first national program of research in the physical and socio-economic problems of reproduction, the Planned Parenthood Clinic of Baltimore announced recently through Dr. J. Herman Long, chairman of the Medical Advisory Board.

This project, announced in New York City by the National Committee on Maternal Health, will be under the direction of the National Research Council. Dr. Long pointed out that the National Research Council is the research division of the National Academy of Sciences in Washington, D. C. Among its many activities is supervision of the research in cancer and poliomyelitis.

The Baltimoreans who will serve on the committee with a group of nationally known scientists are:

Dr. Nicholson J. Eastman, professor of obstetrics at the Johns Hopkins Medical School.

Dr. George W. Corner, director of the Department of Embryology, Carnegie Institution, and chairman of the National Research Council's Committee on Sex Problems.

S. R. M. Reynolds, Ph.D., research associate in the Department of Embryology, Carnegie Institution.

Allis-Chalmers Elects Hugh Comer to Board

Election of Hugh Comer, Alabama cotton manufacturer, to the board of directors of Allis-Chalmers Manufacturing Co., Milwaukee, Wis., was announced recently by Walter Geist, Allis-Chalmers president.

Mr. Comer is president and treasurer

Hugh Comer

of Avondale Mills, Sylacauga, Ala., and chairman of the board of Boaz Mills, Inc., Boaz, Ala. He replaces John H. Collier, chairman of the board for the Crane Co. of Chicago, who resigned because of ill health.

Mr. Comer, a native of Birmingham, was graduated from the University of Alabama in 1914 and his entire business experience has been with these mills. Avondale Mills, which manufactures cotton fabrics and yarns, was founded by former Alabama Gov. B. B. Comer in 1897. It operates seven Alabama plants, at Sylacauga, Alexander City, Birmingham, Pell City, Sycamore, Stevenson and LaFayette.

The new director also is a director of Southeastern Cottons, Inc., New York City; Alabama Agency, Reconstruction Finance Corp.; Alabama Cotton Manufacturers; National Cotton Council of America, and a past president of the American Cotton Manufacturers Association.

United States Plywood Corp. Names J. Thomas Arens

Announcement has recently been made of the appointment of J. Thomas Arens as manager of the United States Plywood Corp. branch warehouse at Baltimore, Md.

Mr. Arens, formerly a United States Plywood Corporation salesman in Philadelphia branch warehouse, joining that branch on a full-time basis in 1935. After three years in the ski troops in World War II, Mr. Arens was assigned to Baltimore as a salesman.

Mr. Arens, who is 35, replaces T. S. Hauck as manager of the Baltimore branch. The latter has been promoted to special field contact representative.

General Electric Names C. E. Horner Division Mgr.

General Electric has established a Water Cooler division and has appointed C. E. Horner as division manager, G. R. Prout, vice president and general manager of the G-E air-conditioning department, Bloomfield, N. J., has announced.

Headquarters for the new division will be at the new water cooler plant at Bowling Green, Ky.

Full responsibility for engineering, manufacturing, accounting, and sales of the water cooler product line, which was formerly handled by the commercial refrigeration distributor division, will be undertaken by the new division.

Until further notice, the G-E plant at Ft. Wayne, Ind., will continue to manufacture water coolers. H. M. Landemare will continue in charge of sales until a sales manager is appointed, and there will be no change in the routine of handling orders, shipments, and billings.

A graduate of Drake University, Mr. Horner began his G-E career in 1935, and served in various statistical and accounting posts at Schenectady until 1937, when he was named a traveling auditor.

C. E. Horner

In 1940 he transferred to the air-conditioning department at Bloomfield, N. J., in general accounting, where he continued until 1941, at which time he received an appointment as works accountant at the Ft. Wayne plant. He served in this post until 1947 when he was placed on special assignments for the department.

Research Institute Names V. H. Schoffelmayer To Staff

Victor H. Schoffelmayer, Science Editor Emeritus of the *Dallas Morning News* and nationally recognized authority on chemurgy, has accepted appointment to the staff of Southwest Research Institute of San Antonio and Houston, Acting Director W. M. Hammond announced recently.

Author of several books on crops, livestock and industry, Mr. Schoffelmayer, who was instrumental in development of scientific farming practices in the Southwest during his 30 years as Science and Agriculture Editor of the Dallas newspaper, will be an active member of the staff of the Institute, recently endowed by Tom Slick, oil man and rancher, to conduct research on a non-profit basis for industry in Texas.

The chemurgy authority probably is best known for his direction of the four-year, $60,000 More Cotton and Fewer Acres contest sponsored by the *Dallas News* in the mid-20's in which the highest yields ever grown on upland—more than three bales an acre—were attained. The contest later was adopted by ten Southern states.

Another achievement accredited Schoffelmayer was his part in the erection at Lufkin of the South's first newsprint paper mill using common Texas pine. Recognizing the natural partnership of agriculture and industry, his writings and counsel are said to have implemented plans which led to building the East Texas plant.

Mr. Schoffelmayer will maintain his residence in Dallas, spending a portion of each month in Southwest Research Institute's laboratories in San Antonio and its Houston offices. A portion of his time will be spent touring the state in the interests of scientific research.

Southern Potash Institute Appoints Dr. H. B. Mann

Announcement has been made of the appointment of Dr. H. B. Mann of Atlanta as vice president of the American Potash Institute. Formerly southern manager of the Institute, Dr. Mann is well known throughout agricultural circles because of his past association with experiment stations and other scientific organizations. He will assume his new duties at the Institute's headquarters in Washington, D. C.

ASCE Names Directors Awards Honors At Meeting

Announcement has been made by the American Society of Civil Engineers to the effect that as the result of a mail ballot conducted among the Society membership, Col. Webster L. Benham, head of the Oklahoma City engineering firm bearing his name, and C. Glenn Cappel, of the W. Horace Williams Co., New Orleans engineering and contracting concern, have been named as two of the directors of the Society.

At the ninety-fifth annual meeting of this group, which was held for four days starting January 21 at the Hotel Commodore in New York, the Society presented awards for the past year to several members in recognition of outstanding work. Included in this group were: Ross M. Riegel, head civil engineer, design department, Tennessee Valley Authority, Knoxville, the James Laurie Prize for his paper, "Structural Features of Hydraulic Structures"; and A. L. Genter, Baltimore consulting engineer, the Rudolph Hering Medal for his paper, "Computing Coagulent Requirements in Sludge Conditioning".

Cooper-Bessemer Names Two Vice Presidents

Cooper-Bessemer Corp., Mount Vernon, Ohio, has announced the elevation of two of its sales executives to positions of vice president.

Those so honored, in recognition of their outstanding sales achievements and their many years of service are, A. A. Burrell, Southwestern district manager, with headquarters in Dallas, and B. L. Potter, midcontinent manager with headquarters at Tulsa, Okla.

Mr. Burrell joined Cooper-Bessemer on January 1, 1925, when it was the C. & G. Cooper Co., and has been Southwestern district manager since that time. He graduated from the University of Michigan with a BS in engineering and had several years' experience in selling oil and gas field equipment prior to joining Cooper-Bessemer. Mr. Burrell has had widespread experience in the Texas, Louisiana and Arkansas oil fields as well as in the development of numerous gas pipe line projects.

Mr. Potter will soon complete his 35th year in the engine-building industry. He joined the Bessemer Gas Engine Co. in January of 1913 and was in charge of its mid-continent area in 1929 when the company merged with the C. & G. Cooper Co. to become Cooper-Bessemer. Since that time, Mr. Potter has occupied the position of branch manager of the Tulsa office.

B. L. Potter

A. A. Burrell

Furniture Association Appoints Richard Kostka

Richard Kostka has been appointed technical director of sales training and store modernization by the National Retail Furniture Assn., according to an announcement by Roscoe R. Rau, executive vice president and secretary. He will have complete charge of the association's store modernization department.

Mr. Kostka, who has a broad background of retail furniture store experience, served during the war years in the Office of Price Administration. He was at one time decorating consultant for the Morrison-Neese store in Greensboro, N. C. He was also director of vocational education for the state of North Carolina.

In addition, Mr. Kostka is a noted lecturer and designer of furniture.

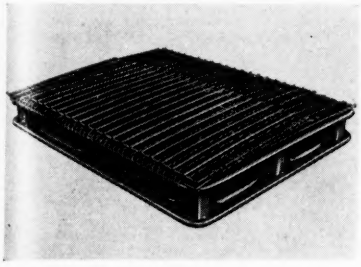
New Products

Pallets

Monroe Auto Equipment Co., Monroe, Mich. has developed a collapsible pallet box, an all-wood pallet and a full line of accessories for pallets, platforms, skids and boxes.

The collapsible pallet box utilizes the Monroe eight-way, all-steel, 40 by 48 inch pallet as a base, and has 8-gauge steel wire sides 24 inches in height, forming a container for handling and shipping of loose material. When not in use or when being returned empty, the wire sides fold down compactly onto the top of the pallet, forming a unit only 7½ inches in depth to effect unusual saving in shipping and storage space.

The collapsible pallet box is available with either the heavier pallet weighing 96 pounds



Collapsible All-Steel Pallet Box

or the lighter pallet weighing 69 pounds. Empty, the complete pallet-box on the heavier base weighs 169 pounds, and on the lighter base, 142 pounds.

The all-wood pallet is an economy product, designed for both factory and shipping operations. Built of hardwood with cement-coated helix drive screws, this pallet has been developed for use with a pallet truck, spaces being provided on the bottom to permit functioning of the pallet truck wheels. The wood pallet is offered in three sizes: 48 by 48 inches, 48 by 40 inches, and 48 by 36 inches.

Multi-Fuel Engine

White-Roth Machine Corp., Lorain, Ohio announces production of a Lorain type "O" single cylinder, horizontal, two cycle multi-fuel engine.

This engine, manufactured as a companion power plant to the current Lorain type "L", is rated at 34.3 H.P. @ 450 R.P.M. It has a 9½ inch bore and 10 inch stroke with Timken bearings on crankshaft and crosshaft. Wet-sleeve type cylinder liners are of alloy cast iron, assuring long life and easy replacement on location, This eliminates costly reboring and shut down time.

The engine may be operated as a cold starting, full Diesel or converted to burn natural gas or butane as fuel. Conversion is easily accomplished in the field.

Condenser type cooling system eliminates need for water pump and makeup water is negligible. Standard equipment includes Twin Disc clutch, Pierce governor, Air Maze oil bath type cleaner and McCord lubricator.

Hand and Platform Truck Wheel

The Dico Manufacturing Co., 400 S. W. 16th Street, Des Moines, Iowa, has announced the addition of a hand and platform truck wheel to their line of industrial and trailer wheels.

This wheel is of bolted two-piece construction and is stamped from heavy 14-gauge steel. It differs from the conventional wheel in that an accurately machined separate steel hub is pressed into the formed wheel disc. This allows the use of a full length 1 inch roller bearing rather than two small bearings, one on each side, Such construction permits greater load capacity, easier wheeling and quick, easy tire changing.

The wheel accepts a 2¾ inch x 10 inch Cushion rubber tire for normal service and 2½ inch x 10 inch round solid rubber tire with flat face for heavy service.

It can also be supplied with various bearing combinations to meet individual requirements.

Junior Marker

Diagraph-Bradley Industries, Inc., 3745 Forest Park, St. Louis, Mo. has recently placed on the market its "Junior Marker" which is made of aluminum and said to be attractive enough to be carried in the shirt pocket. The marker makes either a fine line or a broad line, depending on which surface of the chisel tip is used. According to the manufacturer, the "Junior Marker" can write on wood, paper, crates, boxes, metal, stone, rock, glass, or on any rough or irregular surface. While its principal use is in marking addresses on packages that are too small to be stenciled, it is also finding a ready market for commercial artists, mailing clerks, and others. The marker can be used with any of the complete line of Diagraph-Bradley inks, which are available in nine different colors.

Tape Sealer

Lipton Manufacturing Co., Inc., 52 West Houston St., N. Y. announces an automatic tape sealer for tape widths up to three inches.

This machine is engineered to give perfect performance under any conditions, say the makers. It automatically feeds, moistens, measures, cuts-off and delivers length of tape in one operation.

The tape offers many features such as floating automatic pressure control weight over brush to give uniform, end to end moistening for maximum safety in sealing cartons. The fully covered body keeps tape fresh and clean—keeps machanism dirt-free and dust-free.

Water Mixer

Dole Valve Co., 1933 Carroll Ave., Chicago 12, Ill. has announced production of a water-mixer valve which, the manufacturer claims, decreases the danger of scalding from the domestic hot water supply.

By means of this water-mixer valve, normal cold city water is blended with 190 degree hot water, and a thirty gallon storage tank will deliver approximately fifty gallons of usable 135-degree hot water.

This device was designed especially for tankless heaters and domestic storage tanks. Temperature adjustment controls domestic water to any fixed setting between 120 degrees and 170 degrees F., thus providing safer, tempered domestic hot water. The water-mixer is available in ½ inch, ¾ inch and 1 inch sizes.

Autographic Register

The American Register Co., 564 East First Street, Boston 27, Mass., has developed a portable autographic register for heavy-weight work.

Made of light gauge steel, it is light enough to carry around on a truck or through the plant, yet is sturdy enough to be used as a desk or counter register, state the makers.

The register is adaptable for from two to five copies and a slight pressure on an ingenious started ejects sufficient paper to grasp for speedy extraction of the balance of the form.

It holds up to 75 sets of forms, has a file compartment, uses roll carbon and its styling eliminates all sharp corners that might scratch the surface of a fine desk.

Chemical Pump

Milton Roy Co., 1353 Mermaid Ave., Philadelphia 18, Pa., recently announced its "Constrametric" pump, designed to fulfill the need of the chemical process industries for a pump that will pump at constant controlled flow without pulsation, and in very low capacities.

Constant flow is obtained by translation of the motion of the driver through cams to cause a plunger to move forward at a constant rate of speed. Two plungers in two displacement chambers are employed. The capacity of the pump is fully adjustable while it is in operation, from a maximum to practically zero, through an indicating hand micro adjustment.

The company has announced that production will be underway in six to eight months. Prices are now being quoted by the manufacturer.

Nut Setter

Illinois Gage and Manufacturing Corp., 4639 West Washington Blvd., Chicago, Ill., has produced a torqueless nut setter which operates at high speed, driving a nut or bolt 1750 RPM at free speed, according to the manufacturer. It is also claimed that at point of resistance, impact unit automatically delivers 3000 impact blows per minute. The unit is instantly reversible for removing bolts or nuts. Its capacity is up to ¾-inch bolts and nuts.

Fire Extinguisher

All-Out Manufacturing Corp., 2 Park Ave., New York has announced a dry chemical fire extinguisher weighing ten pounds. The unit is said to operate effectively under various climatic conditions, including wind and drafts.

The chemical is ejected, under pressure, in a flat stream that separates the flame from the burning material forming a fire-smothering cloud over a flaming area up to eighteen feet. The operator is protected from the radiant heat.

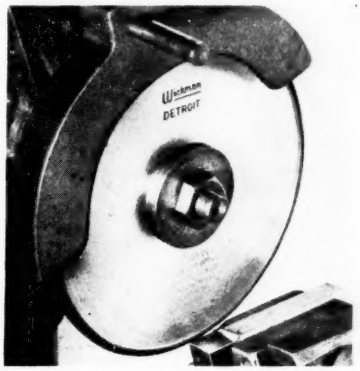
Pneumatic Press

James Industries, Inc., 320 Municipal Building, Skaneateles, N. Y., has announced its Pow-Air portable pneumatic press designed to release large presses on light forming, punching, stamping, riveting, etc. Its capacity is adjustable up to 1500 pounds, and has speeds up to 60 strokes per minute at maximum air pressure of 125 pounds. It uses all or part of a six inch stroke with constant pressure throughout, and has a four-way solenoid air valve with dual safety hand switches. Pedal switches and other controls are also available.

Steel-Bonded Diamond Wheel

Wickman Corp., 15533 Woodrow Wilson Ave., Detroit 3, Mich. has announced production of a steel-bonded diamond wheel for grinding chip breaker grooves in carbide tools.

Chip breaker grooves from .020 inches to .040 inches deep are ground in one pass with this wheel. When the cut is completed, one



Wickman Grinding Wheel

return pass without down-feed allows the wheel to cut itself free and provides a fine finish. The complete operation takes about 1½ minutes for an average size tool. Since only one pass is needed and the carbide is lifted out ahead of the wheel, this method reduces heating and eliminates danger of cracking the carbide tip, according to the manufacturer.

Depending on the size of wheel, from ½ h.p. to 1 h.p. is required to maintain a cutting speed of about 5000 s.f.m. A good flow of coolant is recommended to keep the wheel clean. When necessary, the wheel may be cleaned with a silicon carbide stick.

New Products

Portable Oil Furnace

Service Metal Fabricators, Inc., 2350 W. 58th. St., Chicago 36, Ill. has introduced an oil furnace for commercial buildings.

It is designed for the use in heating garages, warehouses and for buildings under construction where it speeds drying of plaster and keeps crews working in cold weather. Other uses include tobacco store-houses, poultry houses, brooder houses, factories and many others.

It has an underwriters' Laboratories approved jet-type gun burner, the nozzle of which delivers 120,000 B.T.U's per hour at the bonnet. It has a fee air delivery of 2,800 C.F.M. Burns No. 3 grade oil or lighter.

There is a Minneapolis-Honeywell combination fan and limit control and an automatic stack control, automatic humidifier, large capacity filtered air intake, and is attractively finished in gray wrinkel enamel finish.

Equipped with steel skids, it can be moved from building to building or, it can be mounted in a low truck or trailer.

Its design permits using it as a space heater with the plenum mounted on the top of the furnace, or, it can be connected to duct work

Tube Cutter

Capewell Manufacturing Co., 624 Filbert St., Philadelphia, Pa. has produced a tube cutter which it claims features faster, easier and cleaner cutting. With this tool reaming is said to be unnecessary.

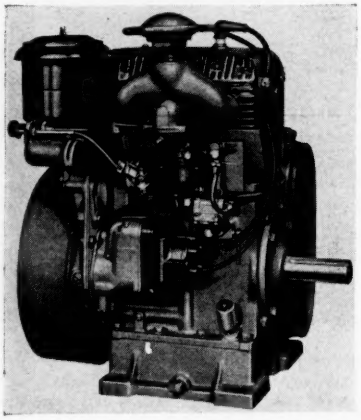
The unit is operated with one hand, as it operates by hand, and not screw pressure. The makers point out that their product cuts dented tubing as well as perfectly round tubing, therefore eliminating the use of a hacksaw.

The cutter is handy for close quarter work because the specially hardened cutting wheels make a complete cut by rotating the two slightly beyond a 120 degree arc.

Two-Cylinder Engine

Wisconsin Motor Corp., Milwaukee 14, Wis. recently announced its models TE and TF two cylinder engines. The design of these engines will give many advantages over equipment powered by engines of out-dated design, according to the manufacturer. The positive air-cooling, requiring no attention, gives definate advantage over water-cooled engines it is claimed.

Positive cooling is obtained from a large fan cast in the flywheel, which forces a strong



Wisconsin Air-Cooled Engine

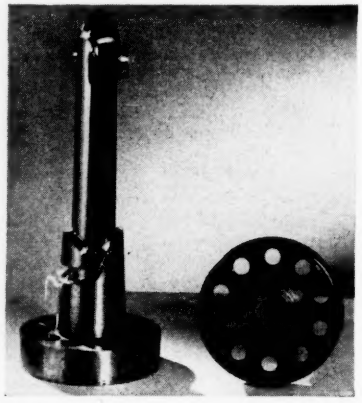
blast of air across and around the cylinders and heads.

Long life and dependable service may be expected due to such engineering features as tapered roller main bearings, counter balanced crankshaft, mirror finish on crank pins, molybdenum iron valve seat inserts and honed cylinders.

Injection Cylinder

Lester-Phoenix, Inc., Cleveland, Ohio, announces the development of an injection cylinder with independent temperature control in its spreader and a completely annular material passage. This cylinder is an outgrowth of original experiments with internal heating of the spreader.

The advantages claimed by the manufacturer and the characteristics observed in actual use are as follows: Increased plasticizing rate for any given inventory of material due to curing the plastic from the inside as well as the outside; more effective pressure transfer from plunger tip to nozzle because of totally unrestricted material passage; accurate temperature control to within a few degrees of both the spreader and the cylinder body in three zones by the use of pyrometers and easy disassembly for cleaning.



Spreader Of Injection Cylinder

First Aid Kits for Burns

Three first aid kits, for emergency treatment of burns, have been developed by the Medical Supply Co., Chicago. The kits, especially made for the use by fire departments, provide special protection anywhere people work with heat or with inflammable materials.

Each kit is packed with an assortment of specially selected first aid units. These include bandages, antiseptics, inhalants for shock, Foille emulsion for application to the burned area, and other necessary items.

Every individual dressing is sealed within a sterile packet. Only the one needed is opened. All others remain sterile until they are used. Individual unit replacements can be ordered to keep the kits completely stocked at all times.

A Burn Spray Kit includes a sturdy spray gun and five 4-oz. bottles of Foille emulsion, with additional first aid units to make up a complete assortment. The Foille emulsion is a medically accepted emergency dressing for burns. Application by spray is quick and gentle, both essentials in treatment of serious burns.

The emulsion is ready-mixed. Spray can start as soon as the bottle cap is removed and the bottle screwed to the spray gun.

Shearcutting Tool Bit

Shearcut Tool Co., Box 746, Reseda Post Office, Los Angeles, Calif., has announced the Shearcutter which, it claims, is the only pre-sharpened shearcutting tool bit on the market. Utilizing the principle of molecular cleavage, this tool reportedly cuts metal with a knife-like action, instead of chiseling it off by the common metal-rupturing method employed with conventional tool bits.

Precision tolerances may be held with this bit, and finishing cuts often may be eliminated according to the manufacturer. The tool may be used on copper, brass, bronze, plastics, cast iron, steel and other ferroud and nonferrous alloys without changing the original grind.

Generators

Buda Co., Harvey, Ill. has announced its line of industrial gasoline engine electric generator sets which are available in DC or AC output, single or three phase and in sizes from 10 KW to 125 KW. Each set is complete and fully equipped with controls, generator, radiator and engine all mounted on a self-contained base.

Gasoline engine (also available with natural gas and butane engines) is water cooled and compactly built. Full circulating pressure system of lubrication is provided to all crankshaft bearings, camshaft bearings, rocker arm bearings, and rocker arm shaft. Equipment on engines includes electric starter, lubricating filter, and air cleaner.

Generator is direct connected, single ball bearing heavy-duty, drip-proof construction, and conforms to A.I.E.E. and A.E.M.E. standard. Control panel is complete with voltmeter, ammeter, circuit breaker, rheostat and engine controls.

Gasoline generator sets are designed for both standby and standard service. When designed for standby service, the engine speed is moved up so that greater KW capacity may be obtained on the same set. When used for continuous or standard service the engine speed is set so it will have a long continuous life.

Coating Compound

National Engineering Products, Inc., Commerce and Savings Building, Washington 4, D. C. has developed a coating and sealing material known as Plastic Metal.

This is one of a series of materials comprising a metallic filler and a plastic binder. These materials are designed for tenacious adherence to all of the common metals and for performanence and durability.

Its consistency is putty-like, suitable for applications with a trowel, spatula or caulking gun.

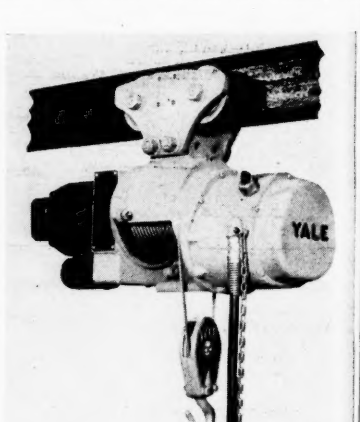
Wire Rope Hoist

Yale & Towne Manufacturing Co., 4530 Talony St., Philadelphia 24, Pa. announces a line of low-cost, low-capacity, wire rope hoists—designed to bring the advantages of cable and drum hoisting to a wider industry group.

The light-duty hoist will be known as the "Load King", and will be available in ¼, ½, and 1-ton capacities.

The frame of the portable hoist is a heavy, one-piece, ribbed-steel casting, constructed for use with lug, plain trolley, motor trolley, or winch-type mounting.

It is equipped with a large-diameter drum with machine-cut grooves for guiding the



Yale and Towne "Load King"

cable as it winds. The drum has sufficient capacity to provide for full standard lift without overlapping of cable.

The reversing-type motor is rated to operate under constant service with full load without destructive over-heating.

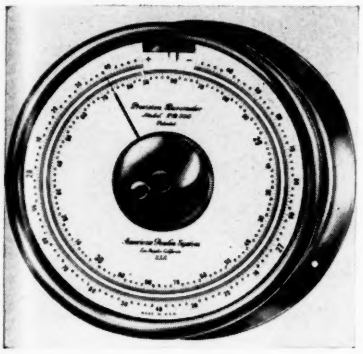
New Products

Precision Barometers

American Paulin System, 1847 S. Flower St., Los Angeles, Calif., are now manufacturing barometers which it claims offer a decided advantage over the mercury column in both readability and simplicity of operation.

It is graduated in intervals of 1/500 inches of mercury. The system of instrumentation embodied in this product eliminates all friction-creating mechanisms. The slightest change in atmospheric pressure is instantly indicated on the dial and read directly in inches of mercury.

Various models are available for weather station, airport-shipboard, scientific and laboratory use.



Barometers Made in Chrome or Brass

Anti-Friction Bearing

Pal-Vin Machine and Manufacturing Co., Cleveland, Ohio, recently announced that Vincent Palumbo, chief engineer of the firm, has developed and had patented a bearing in which the load is distributed substantially throughout the entire circumference of the bearing, rather than being borne only on the side, as in most existing bearings.

Another important part of this invention is the increased load sustaining capacity afforded by multiplying the rows of rotating bearing elements built into the bearing. According to Mr. Palumbo, bearings incorporating these developments will have greater efficiency, last longer, these bearings are constructed so that the component parts can be made easily and inexpensively by prevailing methods.

These patents include not only bearings of multiple ball type, but also multiple pin, multiple roll, combination pin and roll, ball and roll and oil combinations involving balls, pins and rolls.

Franchises for this patented application of bearings are being offered to manufacturers.

Precision Drill Press

A 14 inch precision drill press has been announced by the South Bend Lathe Works, at South Bend, Ind. The manufacture of a drill press is a departure for this company, which has manufactured precision lathes exclusively for over 40 years. Designed by the same engineering staff and produced with the same manufacturing facilities employed in the production of the well-known line of South Bend precision lathes, the drill press is the result of several years of careful research, thorough testing, and improvement. Both bench and floor models are now in production. Most specifications are common to both models, each having a capacity to drill ½ inch iron or steel at the center of a 14 inch circle. Rugged construction assures lasting precision and durability.

According to the manufacturer, this drill press introduces several original features which add to convenience and ease of operation. A built-in light with independent switch provides shielded illumination for the work area, eliminating the necessity of installing a separate lighting fixture. A quick-acting belt tension release lever simplifies changing the spindle speeds and returns the verticle mounted motor to its original position after each change, thus maintaining the same belt tension for each of the four cone pulley steps.

The drill press is supplied with or without motor, as desired. A ⅓ h.p., 1725 r.p.m. vertical mounting type motor is recommended. An on-off switch, motor line connection cord, V-belt, motor pulley, and 0 to ½ inch capacity chucks are standard equipment.

Magnets

A line of permanent magnetic separators known as Perma-Plate magnets to remove tramp iron from materials traveling down chutes or through ducts has been developed by Dings Magnetic Separator Co., 4740 W. McGeogh Ave., Milwaukee 14, Wis. The magnets are intended for protection of grinders, crushers, stokers, pulverizers and other machinery susceptible to damage by iron and for purification of such materials as food, feed, grain, coal, fertilizer, rubber, textiles, ceramics, plastics, etc.

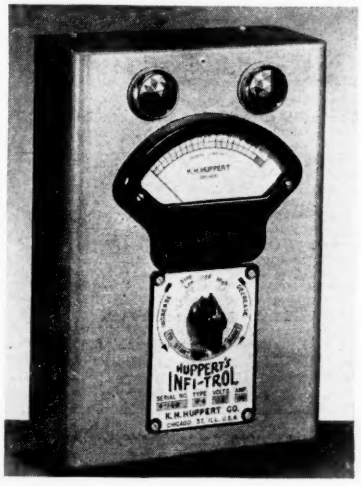
These Magnets consist of a series of "C" shaped Alnico magnets, the poles of which are secured to steel plates and the entire assembly mounted on an aluminum plate. Installation is made by cutting away a section of the bottom of the chute and installing the magnet in its place. The magnet is mounted on hinges so that it can be swung away for removal of collected iron. The steel pole plates project up from the face of the magnet providing edges which help mechanically to arrest and hold the iron.

Temperature Controllers

K. H. Huppert Co., 6830 Cottage Grove Ave., Chicago 37, Ill. has recently announced a series of inexpensive temperature controllers designed for the use with electric and gas heating units. Available with or without pryometers, these step-less input controllers are suitable for electric and gas furnaces, ovens, pots and other similiar applications.

Model IF 4 weighs 5¼ pounds and comes equipped with a pyrometer calibrated to 2000° F. It can be supplied for other temperature ranges. Where pyrometer accuracy is not required or where there is a pyrometer already in the installation, the model IF 2 is furnished. Exactly the same as the IF 4, it is minus the pyrometer and weighs 3¾ pounds.

All models are finished in a baked-on green Alpo enamel and operate on 115 volt A.C. (220 volt units on special order). With plug-in arrangements these controllers are good only for current up to 15 amperes, the rated capacity of the plugs. For any higher current, permanent styles with "knock-outs" are recommended.



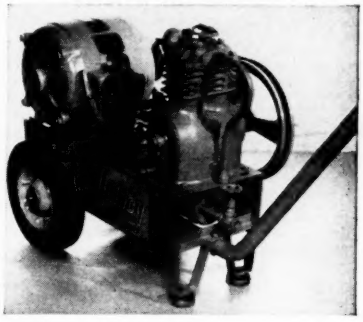
Huppert Temperature Controller

Portable Compressors

Quincy Compressor Co., Quincy, Ill., rounds out its complete line of air compressors for farm, automotive and industrial use with the introduction of three portable models.

Quincy Compressor Model "DX-2" designed especially for farm service, is a self-contained unit mounted on a two-wheel carriage for easy portability. This unit is V-belt driven from either ¼ H.P. electric motor or ½ H.P. gasoline engine of standard makes.

The "TX-8" (illustrated) is available in piston displacements from 4.6 cu. ft. to 8.6 cu. ft., furnishing an operating pressure of 70 to 80 pounds. It is especially suitable for use as a portable air supply in industrial



Quincy Compressor Model "TX-8"

plants. Power is supplied by gasoline engine or electric motor. Entire unit is mounted on structural steel frame with two 10 inch wheels equipped with zero pressure tires. Handle is detachable.

Model "T" is a large portable air compressor unit for paint spraying, chipping, riveting, and caulking as well as drilling, inflating tractor and truck tires. Compressor is of the single stage, duplex cylinder, air cooled type with automotive type pistons furnishing displacements of from 11.1 to 44.0 c.f.m. depending upon the model. Entire unit is mounted on a steel trailer with springs and 5.50 by 16 tires.

Protective Coating

Watson-Standard Co., 225 Galveston Ave., Pittsburgh, Pa. has developed a protective coating for metal parts called Peelcote, which can be easily and quickly peeled off after it has served its purpose.

It is an air-drying coating designed to protect from scratches, chips and corrosion during shipment, storage, handling and some types of fabrication. It can be applied by spray or dip methods and dries quickly. It is removed quickly and cleanly simply by pulling it off.

Peelcote is a vinyl-based coating with complete chemical inertness. It is available in clear transparent or solid hiding black.

Northwestern Tools

Northwestern Tool and Engineering Co., 117 Hollier Ave., Dayton 3, Ohio will present three items at the Tool Engineers Industrial Exhibition in March. The first is a stud set which carries a varied selection of T-nuts for table slotted machines. Each set consists of six T-nuts, four coupling nuts, and four studs in each length from three to eight inches. Lengths up to 15 inches may be attained with the aid of the coupling nuts provided.

The second item to be presented is the standard jig and fixture parts consisting of a wide selection of knurled head screws, shoulder screws, quarter turn screws, press type jig feet and rest pads and double end jig feet.

The company also wishes to announce their step blocks for reducing setup time and protecting table surfaces on punch presses, milling machines, jig borers, slotters, etc. These step blocks are provided either in hard maple or cyanided steel.

New Products

Snap Switch

Allen-Bradley Co., of Milwaukee, Wis., announces the Bulletin 600 manually operated snap switch for starting motors of one horsepower or less. It is a streamlined unit with molded plastic cover, and has an overload device which operates on the soldered rachet principle. It is impossible to hold the switch closed under sustained overload, but can be reset easily, with the regular switch lever, after the overload is cleared.

The switch unit can be furnished without enclosure for mounting in a standard switch box or machine base. Various types of enclosures are also available to meet any industrial requirement.

Mixer and Blender

D. B. Lewis Co., 3406 Avalon Blvd., Los Angeles 11, Calif., recently introduced into the national market a heavy-duty mixer. The outstanding feature of this mixer, according to the manufacturer, is a leak-proof packing gland which guarantees a wasteless and smooth operation. It has all-welded construction throughout, is equipped with self-aligning ballbearings and requires a minimum of horsepower. It is easy to clean and quick to unload. It is manufactured in sizes from 100 to 5,000 pounds in mild steel or stainless steel.

The mixer is designed for all-purpose use, both wet and dry products, such as powders, paint, bakery, flour, soaps, cosmetics, candy and oils and greases.

Impact Wrench

Keller Tool Co., Grand Haven, Mich., has announced production of an impact wrench which has a normal capacity of ⅝-inch bolts and ample power to set nuts that ordinarily require nut setters many times the size and weight. It contains no springs, gears, clutches or complicated devices.

An air motor of the rotary type furnishes the speed and power for fast nut-setting. By means of a built-in torque regulator, power is readily adjusted to torque requirements of the individual job.

The tool can be operated in reverse by turning a reversing valve to serve in disassembly and dismantling operations.

Power Sweeper

Wilshire Power Sweeper Co., 3636 East Foothill Boulevard, Pasadena 8, Calif., has introduced an all-purpose power sweeper that is supposed to keep floors clean of welding rod butts, nails, chips, paper, dirt, waste materials and sand.

Designed so that it can get in close to walls, curbs, trees and fences, the sweeper does a thorough cleaning job quickly and easily, it is claimed.

In collecting waste materials and sweeping the floor or ground in one easy motion (as a vacum cleaner does), the sweeper reduces cleaning time and maintenance costs as much as 75 per cent—easily saving its cost in a short time, according to the manufacturer.

All-Purpose Sweeper

It has a sturdily constructed body of cast aluminum frame with a cover of 20-gauge sheet steel. It rides on 10 by 2.75 zero pressure tires and ball bearing wheels. The sweeper is driven by a one and one-half horsepower, air-cooled, four-cycle gas motor. Its specially designed reel has rotating brushes with highest grade bristles, a floating axle, aluminum brackets, full shaft, and ball bearing mountings. Total weight of the sweeper is 130 pounds; the sweep is 36 inches. Sweeper may be purchased with or without traction power drive.

Rear Seat Speaker

An automoble rear seat radio speaker, manufactured by VanDruff Specialties, 8695 State St., South Gate, Calif., is the accustical answer to the back seat passenger's request for perfectly balanced, audible radio reception. It is also ideally suited for installing in trailers, according to the manufacturers.

The rear seat speaker which is installed in the package shelf of the car has a heavy duty General Electric 6½ inch Alnico V permanent magnet speaker, enhanced with a plastic grill, luxurious in appearance, which is available in gray, walnut or blue to harmonize with the color motif of the car's interior. The grills are specially designed for flexibility to permit installation in any automobile, regardless of the contour of the package tray.

Portable Ventilator

United Electric Motor Co., 178 Centre St., New York, recently announced production of a lightweight aluminum portable safety ventilator.

Called Saf-T-Air, this ventilator has a capacity of 425 cubic feet per minute and weighs fifty pounds. It is made of non-corrosive spark-proof aluminum, and can be connected with the nearest lighting or power supply outlet without danger of overloading.

It can be used either as a blower or an exhauster, and it is said to be excellent for eliminating hazardous gases, fumes, vapors, dust and foul air from drums, vats, tanks, tank-cars, boilers, sewers, manholes, shipholds and other inaccessible places.

Drill Press

Canedy-Otto Manufacturing Co., Chicago Heights, Ill., announces a drill press model, trade-named the "Infi-Speed", which offers an infinite range of speeds between 150 RPM and 3400 RPM.

This fine adjustment of spindle speeds allows for more precise adjustment to the material being worked, increases operating efficiency, and increases drill life. The unit is available with or without a 9-speed power feed.

The drill press was introduced at the machine tool exhibit in Chicago in September. It has also been reviewed and approved by the machine tool authorities of the U. S. Armed Forces.

The Canedy-Otto Company is quoting 60 to 90 days' delivery.

End Wrench Sets

Plomb Tool Co., Los Angeles 54, Calif., has announced three basic end wrench sets, providing the most-used opening sizes.

Set No. 3000BA includes four open end wrenches, with openings (in inches) of ¼ and 5/16, ⅜ and 7/16, ½ and 9/16, and ⅝ and ¾. All of these eight opening sizes are different.

Set No. 1100BA includes four box wrenches, with 12-point box openings (in inches) of 5/16 and ⅜, 7/16 and ½, ½ and 9/16, and ⅝ and ¾. Seven different opening sizes are provided in this set.

Set No. 1200BA includes six combination box and open end wrenches, with openings (in inches) of 5/16, ⅜, 7/16, ½, 9/16 and ⅝. Each combination wrench has both an open end and a 12-point box opening of the same size.

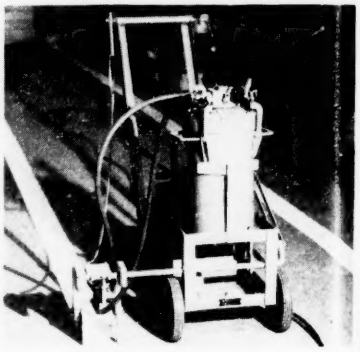
Traffic-Line Machines

Industrial Tools and Products Corp., 614 Jefferson Ave., Rochester 11, N. Y. recently announced the electric model of its Streme-Liner Machine. Some of the features of this equipment, according to the manufacturer are: The design of the paint shield mechanism permits operation over any type of surface; wood-block, maple flooring, concrete, asphalt black-top, cobble-stone, mastic, hard-packed dirt, etc. The device produces clean-cut results whether the surface is smooth or rough.

Three adjustments, quickly and easily made, will permit fractional graduation in width of line from 3 inches to 8 inches.

No sweeping is required to remove loose dust, dirt, light metal chips, etc. The excess air-pressure from the spray nozzle keeps foreign matter from the path of the paint. This feature is very important in producing long-wearing lines.

The off-set construction of the line-marking mechanism makes it possible to paint lines close to stored material, machines, the base of a wall, etc. Lines can also be painted to within 6 inches of a head-on obstruction or dead-end.



Electric "Streme-Liner"

(1) The paint flow control is positive and quick acting, cutting off the paint spray where desired.

(2) The paint shield control handle lifts the entire marking mechanism from the floor when shifting the machine from one position to another. A locking device on the handle bar will hold it there if desired.

A 4-cylinder non-pulsating compressor driven by a 1 H.P. Gasoline engine delivers an ample supply of air without noticeable vibration.

The STREME-LINER machines are in themselves portable paint sprayers. By extending the paint hose and air hose and changing the spray-tip on the gun (spray tips furnished as standard equipment) the outfit can be used for general spray painting.

Resistor

Milwaukee Resistor Co., 700 West Virginia St., Milwaukee, Wis. has announced production for immediate delivery of a ferrule type resistor which will be sold in the same lower price range with standard tab types.

The company guarantees that their product equals the performance of more expensive conventional ferrule resistors in every respect.

Lower costs are achieved through greatly simplified construction. To replace the usual multi-piece assembly, the Milwaukee Co. has applied for patents on a design in which the ends of the risistor core are coated with copper, and serve as ferrules. By thus eliminating the use of separate ferrule tips this method substantially reduces production costs over conventional models.

Type Separator

Dings Magnetic Separator Co., 4740 W. McGeogh Ave., Milwaukee 14, Wis., has announced a complete line of self-contained horizontal and inclined magnetic pulley-type separators, each incorporating an Alnico magnetic Perma-Pulley, idler pulley, endless belt and drive.

These units are designed to provide completely automatic removal of tramp iron from such materials as coal, plastics, ore, grain, feed, foods, chemicals, rock, rubber, slag, cement, sand, clay, etc.,

Trade Literature

Allis-Chalmers Bulletin

Allis-Chalmers Manufacturing Co., Milwaukee, Wis., has released a bulletin entitled, "Standardized Steam Turbine Units." Carrying illustrations of models of six sizes of standardized units, as well as cross-section drawings, the 16-page bulletin furnishes data on their ratings, capability and pressure and temperature limitations. Ratings are 11,500, 15,000, 20,000, 30,000, 40,000 and 60,000 kw.

The bulletin also lists the features and accessories to be furnished with the standardized turbine, the air-cooled and the hydrogen-cooled generators, and concludes with a description of the standardized units' excitation system.

Bearings Company of America Catalog

Bearings Company of America has published the fourteenth edition of its catalog which deals with ball bearings and allied products, and engineering data. The pages of this BCA catalog will acquaint the reader with many types and sizes of BCA ball bearings and assist him in making the correct selection for his particular application.

The booklet is generously illustrated, and contains numerous specification tables, price lists, dimensions and applications.

Brandt Describes Truck Bodies

Charles T. Brandt, Inc., Bush and Ridgely Sts., Baltimore, Md., recently published a catalog entitled "For One or a Thousand," which describes the truck bodies built by its Leonhardt Body Division.

The standard line of bodies is described as well as fabrication methods and standard specifications. Several pages are devoted to photographs of the five basic body styles, and the remainder of the catalog shows the bodies in the various stages of construction, and lists the specialized facilities that are used in the overall operation.

Douglas Fir Plywood Standards

The seventh edition of the Commercial Standard for Douglas Fir Plywood, which has been in effect since September 15, 1947, has been issued by the National Bureau of Standards. Several changes have been made which bring this standard up-to-date.

The present edition covers detail grading requirements for seven grades of exterior type and five grades of interior type Douglas Fir Plywood, as well as tests and requirements for the two types of bondage.

For those unfamiliar with the product, a chart is included showing the types and grades that are generally suitable for a large list of uses, and suggestions are given on ordering plywood so as to prevent misunderstandings. The pamphlet also shows facsimiles of the markings employed by members of the Douglas Fir Plywood Association to denote and identify the several grades.

Edward Valves Catalog

Edward Valves, Inc., East Chicago, Ind., has issued a catalog describing forged steel chrome-molybdenum Intex and Univalves.

Univalves are welded bonnet integral seat valves for service at 1,500 and 2,500 pounds at 1,000 degrees fahrenheit. The bulletin contains many drawings and charts, and gives details of construction, dimensional and design data, material specifications and other data.

Esterline-Angus Bulletin

Esterline-Angus Co., Inc., Indianapolis 6, Ind., has recently published a bulletin No. 247 entitled "Operation Recorders—Their Selection and Use."

This bulletin contains a factual and straight-forward description of the operation recorder, its design features, methods of installation and applications. It is generously illustrated with photographs and charts showing the recorders in operation, and describing the numerous uses to which they may be put.

Giddings and Lewis Handbook

A recent work added to the small but growing list of urgently needed books on machining is the "Handbook for Horizontal Boring, Drilling and Milling Machines" published by the Giddings & Lewis Machine Tool Co., Fond du Lac, Wisc.

In the 266 pages comprising this book, more than 325 illustrations, drawings, charts, diagrams and tables aid the reader in visualizing the practical information presented. A large clear type face is used throughout the Handbook, making the format both pleasing and easy to read. A sturdy, loose-leaf binder has been adopted to permit keeping the Handbook perpetually current. In addition, an entire section of the book has been set aside for "Outstanding Applications." In this section will be inserted the latest and most advanced machining techniques as they are developed. Such important subjects as Diesel engine machining, locomotive cylinder machining, traction motor machining and many others will be written about and regularly furnished each book owner without charge. This practical field information on machine performance will be arranged in interesting data sheets and will conform to the book's general format.

Handling Industrial Waste Disposal

Manufacturing Chemists' Association Washington, D. C., has announced publication of a manual to guide plant managements in setting up company organizations to handle problems of industrial waste disposal.

Water pollution affects "practically every town and industry" in America, the publication declares. Raw sewage from 47 to 60 million persons is being dumped into streams, it states, while industrial waste discharged without treatment adds organic pollution equivalent to the sewage from 55 to 60 million additional persons.

The manual is being distributed to some 200 manufacturers, more than half of which are chemical companies holding memberships in the association.

Without going into technical details of pollution control, the manual gives step-by-step procedures for determining the extent to which factory control measures may need to be instituted and for organizing waste disposal supervision within companies.

It recommends that waste disposal be brought into the laboratory and made a part of the research that develops new products. It points out also that operation of pilot plants affords management an opportunity to obtain valuable data on the waste produced in the manufacture of a new product as well as ways in which pollution control can be engineered into the design of a new plant before full-scale production begins.

Lenderking Lists Products

Lenderking Metal Products, Inc., 100 S. Linwood Ave., Baltimore 24, Md., recently published a folder in which it describes in words and pictures the many products that it manufactures. The list includes doors, lockers, cabinets, sinks, etc., and they can be made of iron, steel, copper, bronze, monel, magnesium, aluminum or stainless steel.

Also included in this folder is a listing of the equipment and tools used, or available for use in the firms factory, to give an idea of the many and various products that it can manufacture.

Link-Belt Packing, Handling Book

An 8-page book, No. 2073, illustrating and describing green-vegetable packing, handling and icing methods, has been published by Link-Belt Co., Chicago, San Francisco.

Ice crushers and pulverizers; ice crusher-slingers for "top-icing" long-haul shipments of green vegetables; conveyors for vegetables, culls, crates, block ice, crushed ice, and a complete line of power transmission machinery, are the featured items.

Pipe and Tube Mill Bulletin

American Electric Fusion Corp., 2600 Diversey Ave., Chicago 47, Ill., has issued a bulletin describing their tube mills for transforming strip steel into mechanical tubing with outside diameters up to 4 inches and American Standard Weight pipe ½ inch through 2 inch. The bulletin describes operation of the equipment, illustrates a medium wall tube mill and gives brief specifications.

Page Gas Welding Wire Catalog

Page Gas Welding Rods Catalog, has been released by the Page Steel & Wire Division, American Chain & Cable Co., Inc., Bridgeport 2, Conn.

This 3-color, 24-page brochure is devoted exclusively to gas welding wire and its use. Easy-to-find index plus orderly layout, makes this catalog very easy to use. It covers the complete Page line; gives the application, procedure, proper torch adjustment, physical properties, etc., of each gas welding rod. And on the back cover, there's a convenient reference chart, "Page Welding Electrodes and Gas Welding Rods." Numerous application photographs are shown throughout the booklet.

Goodyear Rubber Catalog

"A Primer On Rubber For The Printer," 14-page illustrated catalog, has been issued by the mechanical goods division of Goodyear Tire & Rubber Co., Akron, Ohio.

The booklet points out the advantages of rubber printing materials and describes the company's products in this field: rubber plates, engraving, unvulcanized and stamp gums, special fabrics and rubber cements, all of which are used extensively in a wide variety of fields.

Rust-Oleum Bulletin on Coatings

Rust-Oleum Corp., Evanston, Ill., has recently issued a descriptive bulletin on Chemical Resistant Coatings now in production by Rust-Oleum. Designed specifically as a coating for service under severe acid or alkali fumes, condensates, moisture vapors, alcohol fumes, greases and oils, these new coatings are fortified with rubber to resist chemical conditions which are the major cause of rust in many types of industrial plants.

The center spread of the bulletin describes in detail how the Rust-Oleum chemical resistant coatings provide effective, economical and lasting protection against rust where ordinary oil-type coatings are unsatisfactory. Complete data is given on coverage, thinning, accumulated condensation, heat resistance and interior of metal storage tanks.

Actual instances of the coatings in use are shown in photographs of plants whose equipment includes tanks and pipes for the storage and use of chemical products, such as in galvanizing, plating and process chemical plants, fertilizer and citrus canning plants, paper mills and smelters.

Listed on the bulletin's back page is a 9-point check list that outlines directions for applications of the chemical resistant coatings on both rusted and clean metal.

Tweco Literature Release

Tweco Products Co., Wichita 1, Kans., has recently published its form No. 1948-T Tweecolog which contains up-to-date information on the full line of Tweco cable connections for electric welding, and is of interest to those firms or individuals who use the electrical welding process in manufacturing, maintenance or repair of equipment—industry, construction, institutions, schools, etc.

This twelve-page booklet fully describes the complete line of welding electrode holders, ground clamps, cable connectors, marine terminals, cable splicers, lugs and carbon holders. Quantity price and parts information is included.

Wheeler Manufacturing Co. Catalog

C. H. Wheeler Manufacturing Co., Philadelphia 32, Pa., has recently published a catalog, number 1462, entitled "Steam Jet Ejectors." Briefly, this catalog contains 36 pages and includes 30 sectional drawings. It covers the theory and operating characteristics of steam jet ejectors for all classes of vacuum service, including two, three, four and five stage types. Non-condensing and condensing types, with barometric inter-and-after condensers for vacuum requirements in chemical plants, food plants, sugar refineries, oil refineries, power plants, etc., are fully covered. It also includes information regarding steam jet vacuum refrigeration for water cooling requirements for air conditioning and process applications.

The Southern Spotlight

(*Continued from page* 12)

during 1947 exceeded $400,000,000 for the first time in history. This compared with sales of $397,200,000 in 1946. The 1945 figure was $306,500,000. Opinion of businessmen here is that total sales this year will at least equal if not exceed those of 1947.

• **Credit.** The changing pattern of consumer purchases, the Federal Reserve Bank reports, affects the inventory pattern of retail establishments. The amount of inventory expansion that occurred during the latter part of 1947 could not compare with the expansion which took place during the latter part of 1946. Credit sales continue to expand, especially in the purchase of durable goods. A further expansion is anticipated in coming months as these goods appear in larger supply and as individual cash on hand dwindles.

• **The Outlook.** Both merchants and manufacturers in the region have the general feeling that this year will be another of high level activity in many lines. Heavy backlogs of demand still exist in a number of lines, particularly hard goods. Expansion of physical manufacturing facilities and a general improvement in the agricultural picture are expected to combine to hold employment to a relatively high level while increasing production, and consequently, consumption.

Ready markets will be found, in the opinion of C. Parker Persons, regional director here of the U. S. Department of Commerce, for such commodities as naval stores, tobacco, lumber, pulp and paper and certain other products being produced in abundance in the region. Furniture production, which is a growing industry in the Southeast, is expected to continue at record levels and the outlook for construction activity is good.

PRODUCTION

• **Textiles.** The textile industry, a great economic bulwark in the region, has an outlook for "sustained financial health," said Mr. Persons, "through an increase in the current high levels of production." He indicated that increased production of better quality textiles would serve to help curb the inflationary spiral.

AGRICULTURE

• **Production.** Demand for dairy products is expected to remain at about 1947 levels and output of milk also is expected to be approximately the same. There may be somewhat of a decline in egg production, due principally to feed shortages. Production of tobacco and processed fruits and vegetables is expected to hold at 1947 levels.

• **Crop Value.** The 1947 value of Georgia's crops has been set by the Crop Reporting Service at $466,491,000 a gain of 11 per cent over 1946 and exceeded only by the all-time high of $578,000,000 in 1919. Tobacco, corn and wheat average yields per acre set new records. Peanuts and tobacco set new value records for the fourth consecutive year.

• **Market Prospects.** The Federal Reserve Bank of Atlanta says: "Although the reductions of world-wide barriers made at the Geneva conference are so comprehensive that no precise idea of their effects can be determined, it appears that in the long run they will tend to expand markets for some district (sixth) farm products. Since most countries now regulate foreign trade by import and export licensing, however, many of the concessions made at Geneva will have few immediate effects or none."

CONSTRUCTION

• **Housing.** The Atlanta Housing Authority has disclosed plans to build 1,000 additional dwelling units at a cost that may reach $40,000,000, but the construction is contingent upon authorization by Congress of additional loans to public housing authorities. Such an expansion would double the number of public housing units in Atlanta. More than 7,000 housing units were started here during 1947, representing a new record for residential construction. Nevertheless this was below the national average. Total construction cost for the units started here last year was $46,000,000. The gain in number of units over 1946 was 3 per cent but the increase in dollar cost was 37 per cent.

UTILITIES

• **Power Production.** Figures of the Atlanta Federal Reserve bank indicate that the power situation in the Southeast is more critical than that in the nation as a whole and that the condition will grow more acute through the winter. Some curtailment or rationing of current to customers is anticipated.

Demand for additional power has grown rapidly in the region. Plans have been mapped by the public utilities for a multi-million-dollar expansion. During 1947, the Atlanta Gas Light Co. increased its number of meters in the state by more than 11,700 and the Georgia Power Co., added more that 32,000 new customers.

• **Telephones.** Southern Bell Telephone & Telegraph Co. installed 32,577 telephones in Atlanta alone during 1947. During the year the number of telephones in Georgia as a whole rose 14.4 per cent as compared with 8.5 per cent in the nation. The company spent an estimated $21,000,000 in a 1947 construction program in Georgia. In the nine states it serves, it spent about $125,000,000 for construction during the year.

FINANCE

• **Bank Clearings.** Another indication of the progress of this hub of the Southeast in 1947 lies in bank clearings, which amounted to $10,804,400,000. This compares with $9,804,300,000 for the preceding year.

NEW BUSINESS AND EXPANSIONS

• **Prospects.** Atlanta currently has a backlog of 380 business prospects seeking location here. The Industrial Bureau of the Atlanta Chamber of Commerce believes that more new industries will be situated in Greater Atlanta area this year than last. Moreover, expansions now under way indicate that by midyear Atlanta will have considerably enlarged and improved gas and electric power facilities.

Birmingham District

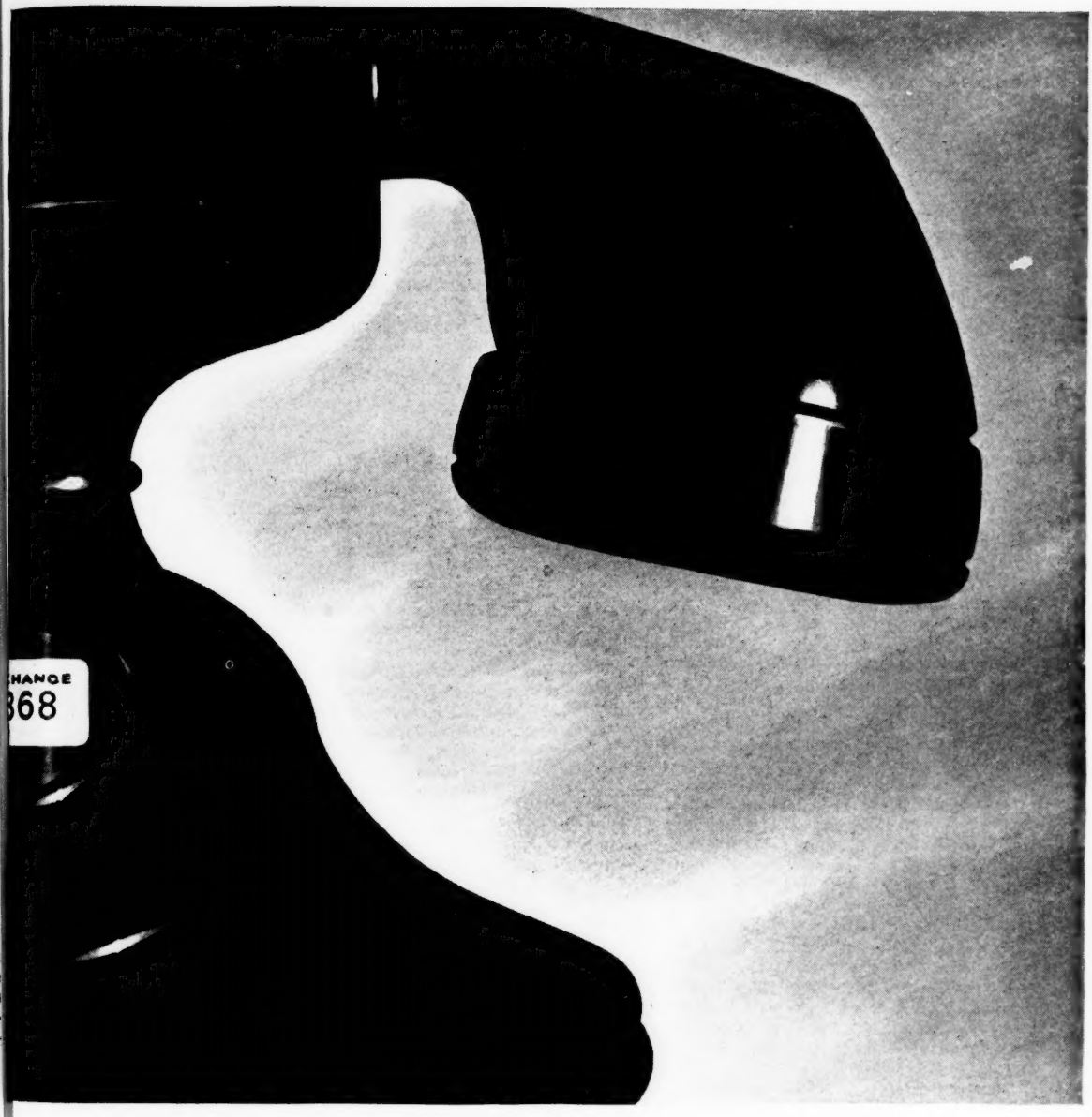
BY R. W. KINCEY

Birmingham—Indications multiply that 1948 will be an even more productive year, industrially, than a great many of the district's most sanguine prophets anticipated. There are a great many signs on the horizon pointing exactly that way. In the first place, anticipated 1947 records were bettered in several instances, and there was in almost every instance, a large carry-over of orders into the New Year.

PRODUCTION

• **Steel.** Steel will be bolstered by completion of cold rolled sheet facilities at Fairfield and with availability of the new open hearth furnace of T.C.I. along with additional coal mining capacity, new coke ovens and miscellaneous new equipment. Entrance of the J. I. Case Company, Racine, into the southern territory was announced during the month with purchase by that company of the Kilby Steel Company at Anniston. Kilby has been producing parts for Case farm

(*Continued on page* 54)



BIGGER VALUE EVERY DAY

You can reach more people than ever. More people can reach you.

Last year we added more than 10,000 new telephones every working day. We're doing even better than that now.

More than 6,000,000 telephones—including many for your own particular friends and neighbors—have been added in the last two years.

Nowhere in the world do people get so much for their telephone dollar as right here in this country.

BELL TELEPHONE SYSTEM

(*Continued from page* 52)

machinery. Reports are that the same production will continue on an enlarged basis.

• **Natural Gas.** Of vast importance to the district is approval by the Federal Power Commission of Southern Natural Gas Company's application to expand a main natural gas line to 384,500,000 cubic feet daily at a cost in excess of $12,000,000. It will serve areas in Alabama, and Mississippi. The gas program is doubly significant to the Birmingham district which annually is forced to cut off supplies to local industries to conserve home-heating gas in such weather as the district has just experienced.

• **Coal.** Coal production for 1947 was 17,401,000 tons as compared to 16,050,000 tons last year. Indications are for continued steady production, especially if export holds up. Here during the month was John D. Battle, executive secretary of the National Coal Association, as speaker at the Traffic Club's annual industrial dinner. Mr. Battle foresees continued stability for coal. He predicted smokeless home heaters and a steam turbine locomotive which will give the Diesel "a run for its money."

• **New Orders.** The district heard itself spoken of in lavish praise January 17 when a nine-car special train brought officers and directors of the Illinois Central Railroad here for a meeting and inspection trip. It also brought announcement from Wayne A. Johnston, president, of an order for 1,000 coal cars valued at more than $4,000,000 and providing more than 1,000,000 man-hours of employment. The order boosts Pullman-Standard Company's backlog to near the 10,000 mark and there is other business definitely in sight.

NEW BUSINESS AND EXPANSIONS

• **Electric Power.** One of the most heartening announcements based not only on an abiding faith in the district and territory but on reliable indications of what is to come, is from the Alabama Power Company whose 1948 budget for operating expenses and construction tops $38,000,000. Total construction expenditures will run an estimated $18,000,000 of which nearly $8,000,000 will go for completion of the 120,000 kilowatt steam generating plant at Gadsden. Additional millions will be spent for construction at other steam and hydro plants, for extension of electric service into rural areas, and for betterments and expansions generally. Anticipated power requirements of its territory prompt the huge outlay, Thomas W. Martin, president, said.

The Southeast

BY DAN SUMMERS

Dallas—The oil producers, the farmers and ranchers, the industrialists of the Gulf Coast, and the whole of the Southwest, undoubtedly got a good soaking in the flood of business activity that poured over the Southwest last year. The rich oil fields, which provide two-fifths of the Southwest income, ran into a winter of capacity demand and the farmers, dripping with an estimated $3,000,000,000 income during 1947, saw more pennies from heaven in the winter rains which fell upon their winter pastures, wheat and vegetable crops. Intensified demands forced many industries into expanded operations during the closing months of the year and retail sales climbed to record highs.

AGRICULTURE

• **Production.** The winter vegetable crops appeared in excellent condition at the first part of the year. Cotton production figures for 1947 will show the biggest cotton crop since 1937. Last year's 3,360,000 bales in Texas still fall far short of the 1923 crop of 4,340,000 bales. Dr. A. B. Cox, authority on cotton and cotton marketing, was not impressed by the income figures from this crop, but felt, however, that there are great opportunities in Texas to increase the income from cotton and cottonseed by a more extensive use of them as raw materials for new industries in the state.

Elsewhere in the Southwest, the grapefruit crop was equal to the record crop of 1945. The Valley area of the Rio Grande also showed indications of making a record orange crop of 5,800,000 boxes. Marketing of these crops has been weak because of a late season and poor prices. A drought during the late fall caused a retarded growth on grazing lands but which only leaves the fields open for better spring grazing.

CONSTRUCTION

• **Materials and Costs.** There seemed to be a general feeling among those who had not built by the start of 1948 that they would either have to build now at the inescapable high prices or not build at all this year. Contractors in this area are six to eight months in obtaining steel deliveries. Lumber is available and at slightly lower prices than last fall when construction boomed after government controls were dropped. This weakened resistance to high construction costs should result in heavy building in 1948.

• **1947 Review.** There was no doubt, although final figures are not available, that the Southwest had experienced its greatest peacetime construction period in 1947. Estimates are not available on Oklahoma, but Texas has figured about $646,850,733 worth of construction contracted last year which is still $200,000,000 short of the peak 1942 building.

LABOR

• **Employment.** There is still a crying demand for labor in this area reflecting the peak employment reported by the various industries. The apparel industry, somewhat inactive in the first half of the year, threw all its machinery into gear later and by the end of 1947 was near an all-time peak in employment.

The same story was true in the chemical plants scattered over Oklahoma and Texas, the many Southwest food processing plants, and the wood products industries in Eastern Oklahoma and Texas. Hardest hit by far was the petroleum industry, a giant consumer of labor and materials in its fields, at its refineries and in its allied industries.

PRODUCTION

• **Oil.** Demand for crude oil products is being partially met with capacity production. The oil companies have expanded mostly by purchasing huge war surplus plants and converting them to suit their own needs. The steel shortage, however, prevents exploration and developments which could partly alleviate the demand for oil. Transportation by oil tankers has its bottlenecks and they, too, can be traced back to the steel industry, producing at 98 per cent capacity.

FINANCE

• **Banking.** R. R. Gilbert, president of the Federal Reserve Bank in Dallas, said the high level of activity in all the important segments of the Eleventh District is reflected by significant increases in the important banking items. He reported assets of members banks as estimated risen by more than $465,000,000 during 1947.

Loans expanded by approximately $220,000,000 and total investments increased more than $130,000,000. Demand deposits increased by more than $350,000,000 and time deposits rose by about $80,000,000.

New and Expanding Plants

(*Continued from page* 16)

Corp., channel black plant and gasoline plant. $3,500,000.

SAN ANTONIO—Carpenter Paper Co., addition to present building, 519 N. Medina St.

SAN ANTONIO—Express Publishing Co., transmitter building and tower, Sequin Highway and Artesion Rd.

SAN ANTONIO—A. Gruber, addition and remodeling of building, 3818 Broadway.

SAN ANTONIO—Humble Oil and Refining Co., service station, Broadway and Joliet St.

SAN ANTONIO — George H. Rhine, one-story building, Mistletoe and San Pedro Aves.

SAN ANTONIO—Texas Vegetable Oil Co., structural steel tower to house vegetable oil deodorizing plant at existing plant on Sequin Rd.

SAN ANTONIO—Yellow Transit Co., building, corner Avenue B and Jones Ave.

SEAGRAVES—Columbian Carbon Co., has purchased government carbon plant for $1,420,000. Stanolind Oil and Gas Co., Tulsa, Okla., natural gasoline plant in Slaughter Field, Hockley County.

TEXAS CITY — Pan American Refining Corp., buildings to house offices.

TYLER—Southwestern Bell Telephone Co., building, Elm and S. Vine Sts.

WACO—Louis Kousel, one-story post office substation, 25th. St. and Bosque Boulevard.

WACO — Texas Co., service station 1801 Franklin Ave.

VIRGINIA

HAMPTON—Perfect Brassiere Co., Inc., acquired USO building on Academy St., plan installation of new machines.

RICHMOND—Commonwealth Natural Gas Corp., plan construction of facilities.

RICHMOND—Peden Steel Co., steel shop, $30,000.

RICHMOND—Virginia Electric and Power Co., large expansion plans: steam power station, Quantico, and additions to power stations at Chester, Bremo Bluff and Norfolk, $25,000,000.

ROANOKE—Norfolk and Western Railway Co., replacement and improvement of present interlocking plants at Roanoke; passenger station at Walton, and modernization of signal system between the two points, $1,000,000.

WEST VIRGINIA

BECKLEY—Republic Steel Corp., acquired two coal producing firms: Standard Fire Creek Coal Co., and Fire Creek Fuel Co.

CHARLESTON—Atlantic Seaboard Corp., and Virginia Transmission Corp., plan extending systems, $20,649,600.

Georgia Hardwood Buys Control of Plywood Firm

Announcement has been made by Owen R. Cheatham, president of Georgia Hardwood Lumber Co., that his company has purchased stock control of the Washington Veneer Co. from Weyerhaeuser Timber Co.

Washington Veneer Co. owns two plywood mills located at Olympia, Wash., and a sixty per cent interest in the Springfield Plywood Corp., which operates a plywood mill at Springfield, Ore. Coupled with the Bellingham Plywood Corp., Bellingham, Wash., controlled by Georgia Hardwood, the four plants have a combined production of approximately 250,000,000 feet of plywood annually.

Capital requirements of $4,500,000 were arranged privately enabling Georgia Hardwood to make payment on a cash basis and to augment its own working capital incidental to enlarged plywood distribution activities. The financing involved a long term loan of $2,500,000 from a group headed by the Bank of America and including The Citizens and Southern National Bank; plus the sale of $2,000,000 convertible preferred stock and fifteen thousand shares of common.

Factory-Dealer Plan For Swift Airplanes

Near-completion of a nation-wide dealer organization for the Swift airplane, the first exclusive factory dealer setup in the light plane industry, was announced recently by Leonard Larson, Swift sales director for Texas Engineering and Manufacturing Co.

The organization has approximately 50 dealers from coast to coast operating directly under TEMCO factory supervision. Each dealer is responsible for service, maintenance and spare parts for the two-place Swift airplane and can appoint sales representatives but the latter are controlled only by the dealers.

TEMCO's organization is the result of several months of intensive work launched in July after acquisition of the Swift manufacturing rights from the defunct Globe Aircraft Corporation. However, during the six months' building program, Swift sales increased each month over the preceding month. Approximately 1,400 Swifts now are flying.

ATTEND THE MOST OUTSTANDING SOUTHERN INDUSTRIAL EXPOSITION!

APRIL
5-6-7-8,
1948
* * *
ATLANTA
MUNICIPAL
AUDITORIUM
* * *
ATLANTA,
GEORGIA

The newest machinery, equipment and industrial products will be shown by leading manufacturers from all parts of the country at the Third Southern Machinery and Metals Exposition. Methods of streamlining manufacturing operations, reducing production costs, and improving quality will be high points of the 1948 show.

Equipment and machinery will be in operation. Factory engineers will be available for consultation about service and process problems. The Industrial Forum and Plant Tours held in conjunction with the Third Southern Machinery and Metals Exposition make this event more outstanding than the successful 1947 show.

Plan NOW to attend! This Exposition has become the focal point of contact between manufacturers and Southern industry. For hotel reservations and other information, write the Exposition Management as soon as possible.

THIRD SOUTHERN MACHINERY & METALS EXPOSITION

267 E. Paces Ferry Road, N. E. **Atlanta 5, Georgia**

Creative Effort

(*Continued from page 37*)

Data in Table 1 show that the ratio of wage earners to population in the South was almost 50 per cent greater in 1945 than in 1939 and that the 1945 ratio was close to the national average in 1939.

These data on patents and publications for the entire South are plotted in Fig. 1 and the data for individual states are shown in Fig. 2.

A surprisingly good correlation can be observed betwee the patent and publication effort. In the industrial advancement of other regions there has been a correlation between the patent and publication effort and the industrial progress but no such correlation is observed in recent data for the South. These inconsistencies suggest the existence of a colonial economy. Economy of this type is unsound and cannot continue unless the inconsistencies are corrected. Regardless of the number of wage earners employed, a balanced economy will be nonexistent until creative and industrial efforts are balanced.

TABLE I
Ratio of Wage Earners to Population for Southern States

State	Wage Earners (100) ÷ Population 1939	1943	1945	Per cent Increase 1945/1939
Ala.	4.1	8.7	6.1	49
Ark.	1.9	3.2	2.6	37
Fla.	2.8	7.7	3.8	36
Ga.	5.1	9.3	7.1	39
Ky.	2.2	4.4	3.4	55
La.	3.0	6.9	4.6	53
Md.	7.8	19.0	10.	28
Miss.	2.1	3.8	3.2	52
N. C.	7.5	10.8	8.6	15
Okla.	1.2	4.1	3.2	167
S. C.	6.7	8.7	7.9	15
Tenn.	4.5	7.9	7.0	55
Texas	2.0	6.2	3.9	95
Va.	5.0	8.1	5.6	12
W. Va.	3.9	6.7	5.6	46
Total South	3.9	7.5	5.7	46
Other States	6.9			
Total U. S.	6.0			

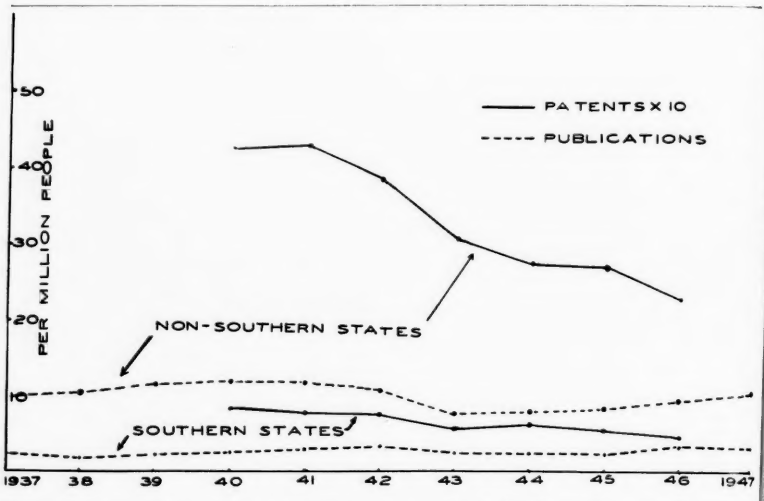


Diagram above shows the relative patent and publication effort of Southern States and Non-Southern States over a period of years.

Synthetic Fuel Industry Would Need Plant Sites

While many Easterners shivered in fuelless homes and other sections of the country watched uneasily the critical fuel oil shortage, one man recently called for a solution that would insure against any recurrence of one of the winter's most irritating problems.

Addressing the American Chemical Society at Brown University, Dr. W. C. Schroeder, chief of the Office of Synthetic Liquid Fuels of the U. S. Bureau of Mines, urged the immediate establishment of a huge synthetic gasoline and oil industry.

Industrial and home use have pushed petroleum consumption to more than 5,000,000 barrels a day since the outbreak of World War II. Rising demand means that imports will have to supplement domestic production of crude oils unless a synthetic fuel industry goes into production.

Almost any substance containing carbon could be the raw material for synthetic gasoline and oil. But enormous volumes of readily accessible materials would be necessary at first, limiting the choice to natural gas, oil shale, coal, and in some instances, agricultural waste.

Most complex problem in setting up the industry, explained Dr. Schroeder, would be selection of suitable plant sites. A plant of minimum size would consume 43,000,000 cubic feet of gas a year, and would require 15,000,000 gallons of water a day for cooling purposes.

The Gulf coast region and southwest Texas could offer reserves of forty trillion cubic feet of gas, but lack the thick beds of coal found and mined at lower costs in Western states.

Where the plants might eventually spring up was a matter for further investigation. For the South it called for a thorough check of what it could offer a prospectively huge industry.

Dissolution Of Merchant & Miners Would End 96 Years Of Operation

Since 1852 ships of Baltimore's Merchant and Miners Transportation Company had steamed coastal waters between Jacksonville and Boston. Gliding into coastal ports, the trim steamers, with cargoes of freight and lists of fun-loving passengers, were a familiar sight to many an east coast resident who remembered, with pleasant nostalgia, wedding trips and entertaining week-end cruises upon the once-elegant vessels.

Through the years, from its founding in 1852, Merchants and Miners enjoyed a highly successful operation. Up to the first World War, it maintained an unbroken dividend record. Veteran of four wars, the company had its 21 vessels commandeered for government use during World War II. Even during these years the company showed a profit by running some chartered boats for the government.

But in mid-January, after being out of operation since March 17, 1947, the 96-year life of the company seemed about to end. Wage increases of 400 per cent and competition from other transportation media made resumption of service a near impossibility in the face of only fractional raises in freight rates.

Through President A. D. Stebbins, directors of the company recommended to stockholders that the company be dissolved. Furtherance of operations would call for wide-scale modernization of facilities. To President Stebbins the large expansion of capital required would be too risky a venture.

Even in its death throes, M & M was good to its shareholders. They would receive $40 a share, if the dissolution was approved; more when assets of the company were liquidated.

Cost Accounting

(*Continued from page* 36)

charged to each lot.

Fortunately, the cost of lumber was only a small part of total factory cost for most of the products of this factory. This fact permitted the entire organization to concentrate its attention on the comparatively few products where the cost of lumber was an important part of total cost. Even though no change was made in the cost accounting routine itself, it was found that a better job was being done in the selecting of lumber for various products and in costing such products.

A Direct Labor Example

The manufacturing company of this example used a cost accounting system in which the departmental timekeeper charged direct labor to each job each day, using a daily time sheet for each man. The daily time sheets had attached to them a number of coupons which were perforated in such a way that they could be removed and placed in envelopes by factory order, after they had been properly extended and checked in the cost accounting department.

There were two types of production orders. One was the so-called "customer order," to which was charged certain parts more or less fully fabricated previously on stock orders, as well as additional material, labor and indirect overhead expense required to complete the customer order. By far the greatest number of orders were the so-called "stock orders," on which standard parts were fabricated for use in assembling articles on customer orders and for sale direct as repair parts. Indirect overhead expense was based on direct labor, using departmental rates.

Direct labor was charged in half-hour units, although in some cases a man worked for several days on the same order and the operations requiring less than an hour were only a very small percentage of the total number of operations. In one department, however, there were quite a few operations on several machines which could often be completed for the average lot in a half hour or even in a shorter period.

The Alternatives

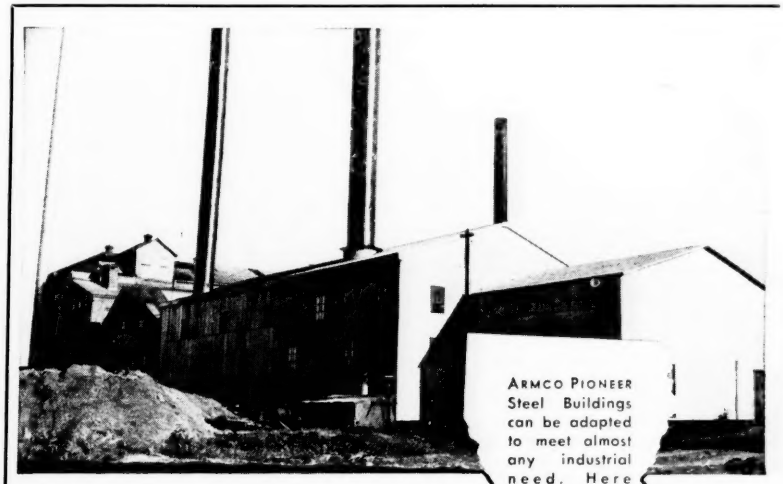
In such cases, it is obvious that the only alternatives were to charge the minimum unit of one-half hour or to charge no time at all. In practically no case was the time less than 15 to 20 minutes and the accepted practice was to charge a minimum of one-half hour to every job no matter how short the actual time might be. From the supervision viewpoint it was simpler to run a number of very short jobs at one time, between the much longer jobs which were also run on these machines, which resulted in a very erratic behavior in the time charged to the longer jobs which were run immediately before or afte. the series of very short jobs.

Practically no jobs on these machines were long enough so that a difference of even a half hour would not be noticed in comparing the time on these operations for successive lots. To make matters worse from a costing viewpoint, the cost for materials on repair parts requiring these operations was usually quite small and the overhead rate quite large, so that the total factory cost varied almost in proportion to the direct labor which was charged to the particular job.

No one connected with this company had really understood the full implications of the conditions described above until an investigation was made to determine the reasons for the erratic behavior of the costs shown by the records for certain repair parts. When the situation did become clear, it was evident that the operating department could not be held responsible for the apparent variations until a more accurate costing method was used. Thereupon the cost accounting department proposed that time be taken in quarter-hour units instead of in half-hour units.

It was evident that, if properly handled, this proposed solution would give much more accurate costs for the comparatively small percentage of operations requiring less than about 45 minutes, but it

(*Continued on page* 58)



ARMCO PIONEER Steel Buildings can be adapted to meet almost any industrial need. Here PIONEER serves a Louisiana sugar manufacturer.

THESE STEEL BUILDINGS are an old southern custom

For more than 30 years southern businessmen have been satisfying their needs for warehouses, garages, factories and similar structures with ARMCO PIONEER Steel Buildings. This way they get the long life and low upkeep of a conventional building plus substantial, mass-production savings.

In the PIONEER Building a framework of cold-formed steel channels is covered with corrugated metal siding and roofing. The result is a sturdy, weathertight building that is fire-resistant and lightning-safe.

PIONEER Steel Buildings are quickly erected by a trained Armco crew. All you need is the foundation and we'll help you design it if you want us to. Buildings may be of any length, with clear span widths from 20 to 100 feet and heights to 24 feet. They can be easily adapted to individual needs. Doors, windows and ventilators may be placed almost anywhere you like.

Should conditions change, ARMCO PIONEER Buildings can be dismantled and quickly re-erected at a new location. Write for more data.

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DIXIE DIVISION: Atlanta, Ga.

SOUTHWESTERN DIVISION: Houston, Texas

Offices in Principal Cities

ARMCO

ARMCO PIONEER STEEL BUILDINGS

Cost Accounting

(*Continued from page 57*)

was also evident that this increased accuracy could be obtained only at considerably greater expense in the cost accounting department. It was felt also that any such change would also increase the already heavy burden on the timekeepers to the extent that the time which they recorded might not really be very much more accurate than was true with the half-hour unit of time.

No Change Made

It was finally decided that it was better to make no change in the costing procedure. It was noted that the erratic behavior of the costs of certain parts was not an extremely important matter. Such erratic behavior did not seem particularly evident in the costs of the various products into which these parts were assembled on customer orders. The pricing of repair parts depended so largely on matters other than factory cost that the situation was not even very important for that portion of these parts sold as repair parts, especially after the real reasons for the erratic cost behavior had become known.

The writer is convinced that the six examples described last month and in this article are typical of the sort of thing which occurs frequently in practically all companies. In each of the six cases the company was a successful company with a carefully designed cost system which apparently gave in a satisfactory manner and at minimum expense the information which it was intended to give.

Nevertheless, the use of the system in a perfunctory way resulted for the two examples of last month in errors which could certainly not have occurred if the various persons involved had really understood the limitations of cost accounting systems in general and in the ones they were using in particular. Perhaps it is not fair to say that the four examples in this article illustrate errors, but it can be stated quite definitely that in each of these four cases those most closely in touch with the operation of the system failed to understand fully just what information could be gotten from the system within the limitations of an economical operation of the system.

Lack of Understanding

The writer believes that it is useless to expect that persons immersed in the details of operating or accounting problems will fully understand the limitations of the methods they are using. It is probable that a principal reason why small companies are often more profitable than large companies in the same industry with which they compete lies in the fact that in the small company top management can often sense conditions like those illustrated in the six examples and find solutions which could not possibly be found merely through the use of the existing operating or cost accounting records, no matter how good these records may be for the principal purposes for which they were designed.

Indirect costs have become such a large part of factory costs that it is impossible in most cases for top management to sense the errors which are made by those members of the organization who must perforce rely upon the information produced by the various systems which they employ. Nevertheless, top management should certainly maintain an attitude which will cause them to study critically the results of the various systems which are used. Top management should always try to look beyond the trees to the forest itself. Top management in the average company is doing a very poor job in this respect with regard to such things as cost accounting.

South Carolina To Have New Chamber of Commerce

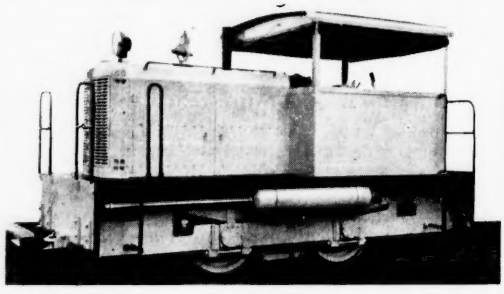
South Carolina is soon to be represented by its own official Chamber of Commerce.

As the result of a mail referendum submitted to voters in December, Organized Business, Inc., of South Carolina announces that its members voted to change the name of the organization to "South Carolina State Chamber of Commerce."

Committee chairman Charles E. Stork of Columbia, S. C., reported that 94 per cent of the membership voted for the old organization to assume its new title. Necessary steps to officially make the change effective were to be taken immediately.

DERAILMENTS MEAN LOST TIME AND MONEY

"On the ground" situations seldom apply to Whitcomb Locomotives. They actually seem able to follow the rails anywhere. Sharp curves, temporary road beds, light rail, uneven or rough tracks hold no fear for these versatile work horses. Scientifically designed, the weight of each Whitcomb locomotive is evenly distributed with a remarkably low center of gravity.



Many Whitcomb Diesel mechanical models with rigid wheel bases as illustrated are equipped with 3 point spring suspension providing cross equalization. This arrangement enables the wheels to conform to the vertical irregularities of the track, reducing the possibility of derailment by preventing too great a concentration of weight upon one rail. It also permits maximum adhesion and greater tractive effort, because all the wheels remain in contact with the rails all of the time.

So for tough car spotting, hauling or switching assignments involving rough trackage, where larger, heavier locomotives would be flirting with trouble—better send a Whitcomb to do the job quickly and economically.

DIESEL LOCOMOTIVES: ELECTRIC DRIVE 25 TO 95 TONS, MECHANICAL OR HYDRAULIC DRIVE 3 TO 30 TONS

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THE WHITCOMB LOCOMOTIVE CO.

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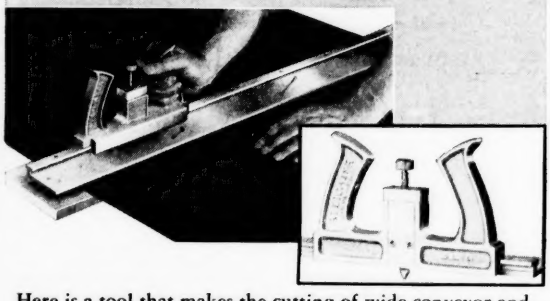
The building requirements of industry are highly varied; but Allied Steel Buildings are ideally suited to the needs of practically every industry. Allied Steel Buildings are constructed of standard sections which may be combined to erect a building of almost any size or shape. They may be enlarged easily and quickly to meet the needs of expanding operations.

Above is an Allied Steel Building used as a boat repair dock in Louisiana. The height of the building permits the lifting of boats from the water for hull or propeller repair.

ALLIED STEEL PRODUCTS CORP.
2100 NORTH LEWIS
TULSA, OKLAHOMA

MAKES CUTTING OF WIDE BELTS *Easy*



Here is a tool that makes the cutting of wide conveyor and transmission belting a simple and easy job—it's the Alligator Wide Belt Cutter for cutting all belts (except those containing metal) up to 60" wide and 1⅛" thick.

The guide rail is clamped or nailed to the belt and the cutter head is pushed across the belt. Each cut is made about ⅛" deep and with several rapid strokes the belt is cleanly and squarely cut.

Bulletin No. BC-350 gives all the details on this new cutter.

Order from your Supply House

FLEXIBLE STEEL LACING COMPANY
4690 Lexington Street, Chicago 44, Ill.

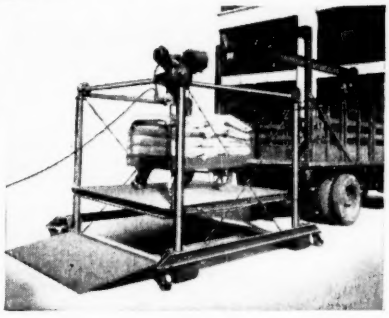
Also sole manufacturers of Alligator Steel Belt Lacing for transmission and conveyor belts, Alligator V-Belt Fasteners and Flex V Fasteners, for V-Belts, Flexco HD Fasteners and Rip Plates and Hinged Flexco Fasteners for conveyor belts.

man-saver

Handles your heavy loads from level to level *Safely • Easily*

NEW SERVICE LEVELER

Portable model at additional cost—can be moved to facilitate loading and unloading of trucks in factory yard, etc.



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SERVICE CASTER & TRUCK CORP.

INDOOR MILES Made EASIER and SAFER

Executive Offices: Albion, Michigan
Plants at Albion, Michigan and Somerville 43, Mass.
Representatives in all Principal Cities

No Apologies for Materials Handling

(*Continued from page* 39)

Evans who, in 1795, published "The Young Millwright and Millers Guide," describing many materials handling devices which were practical and effective. The Link-Belt Company was founded in the 1830's, and many others in the 70's, the 80's and the early part of this century. These companies have a long record of successful application of materials handling equipment to all branches of industry in many complete materials handling programs totaling hundreds of millions of dollars. Their serious attempts go back more than two-thirds of a century—not exactly a "recent development." And, while there have been improvements, the basic forms of modern materials handling equipment are not very different from the same types produced 30 or 40 years ago.

Lift trucks were used in World War I. Even the "fork truck—pallet and rack" systems and methods were fully developed before World War II, in which their use was, it is true, tremendously expanded. But this expansion could not have taken place if the truck and pallet manufacturers had not been ready to produce them.

Materials Handling An Art

While some may look at materials handling as a science, I prefer to consider it an art. A science is exact, but also confined. It does not allow one to deviate from its rules. Materials handling is incapable of being compressed into a series of rules and formulas. It is impossible to say, categorically, that certain types of equipment, relatively placed and used thus and so, are the only combination which will solve a certain problem. Where one thing will work well in a given situation, something else will be better in an almost identical case.

It is precisely because it is an art that it is so difficult to pin materials handling down with the written word. This is one reason why there are only a scant half dozen books available on the subject. Only a couple of them are of any real value. There will be one more practical work when my book on "Trolley Conveyors" is published this year by McGraw-Hill.

Another reason for the scarcity of such literature is that the only ones competent to write on this subject are the men who have spent many years in building the equipment and applying it to industrial programs. It is not the type of work which can be mastered by professors studying catalogues (almost the only available literature) and developing rules and procedures in the classroom.

The materials handling men who have the knowledge and experience either lack the time, or do not have the urge or ability to write, or writing is too much of a job for spare time. Their hard-earned and valuable experience dies with them, and the new men in the game have to learn all over again by the slow, hard way of long years of experience. Perhaps some of them will be more articulate than their predecessors and will be able to make their knowledge available to everyone. If enough of them will write books, each about his specialty, a library is sure to develop which will be of real, practical value. But the book or books have yet to be written about materials handling procedures which will give general principles that can be usefully applied to any industrial activity.

Until then, we shall have to depend on the materials handling engineers, worthy of the title, whose records of genuine accomplishment merit the confidence placed in them by industry.

South Carolina Port News Cites Shipping Activity

The South Carolina State Ports Authority recently published the January issue of the South Carolina Port News, official monthly bulletin of shipping activities in the state's seaports.

Arthur St. J. Simons, of Columbia, chairman of the Authority, in the lead article, says "The year which has passed has seen the greatest forward strides in the state's maritime development in a century." He reviews progress made and outlines expansion plans for 1948.

Three Good Reasons

There are good reasons why so many manufacturers in the South have been customers of First and Merchants for years.

1. First and Merchants' officers are in close and daily contact with manufacturing activities throughout the South.
2. First and Merchants always tries to render various services that are definitely helpful.
3. First and Merchants knows and understands the needs of manufacturers.

Come to First and Merchants first.

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While cosmopolitan in its general appeal, and modern *up to this moment* in its equipment, there is a peculiar flavor of The Old South here which Southerners are quick to note and appreciate. They feel at home and come back to us again and again.

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METALPLATE COMPANY

PRODUCTION PLATING for MANUFACTURERS

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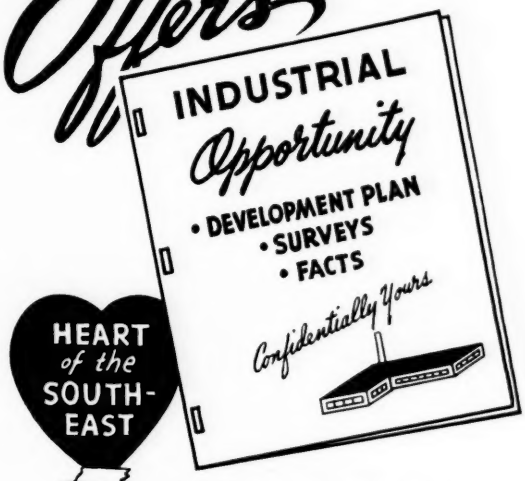

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COLUMBIA
SOUTH CAROLINA

LETTERS

January 15, 1948

EDITOR, MANUFACTURERS RECORD:

We have tried to make ourselves believe that we did not need the RECORD, but, your January sample convinced us that we do need it.

Send us bill for a year's subscription.

Home and Hotel Equipment Co.
Overlook Terrace
Allentown, Pa.
S. W. Christine

January 21, 1948

EDITOR, MANUFACTURERS RECORD:

The writer read with a great deal of pleasure the enclosed Editorial which as you know was taken from your publication. * This appeared in yesterday's issue of the *Deland Sun News* and has received very favorable comment.

It may be interesting to you to know that the writer does not employ an advertising manager. I write my own copy. I feel flattered that a publication such as yours would make such nice comments about it.

The writer for years traveled for the Richardson Co. of Lockland, Ohio when they manufactured roofing and am quite familiar with the type of trade journal you publish, having read it for years.

To show my appreciation in a small way, I sent you by express prepaid a bushel of BILL'S PRIDE tangerines and trust they will be received in good condition. This is not the regular Dancy tangerine, and so far as I know only two other groves in Florida produce them.

Again thank you for your kindness and hoping that if you are in Florida you will accept my invitation to visit us.

Sincerely yours,
William C. Smith

January 21, 1948

EDITOR, MANUFACTURERS RECORD:

Ralph Harrington has turned over to me a copy of your January issue of MANUFACTURERS RECORD in which you carry a picture of our Waco, Texas plant. Your coverage in the South and Southwest is excellent, and I want to thank you for including The General Tire and Rubber Co. in your very excellent article.

I am curious to know where you obtained the picture of our Waco plant. If your photographer took the picture, I wonder if it would be possible for him to send us the negative. It is one of the best pictures I have ever seen of our Waco plant and I would like to have this print.

Again thank you for including The General Tire and Rubber Co. in your fine article.

Sincerely yours,
The General Tire and Rubber Co.
Edward B. Butler
Director, Public Relations.

* See MANUFACTURERS RECORD Dec. page 34.

Textile Leaders to Study Japanese Import Threat

Three textile industry leaders boarded a transoceanic plane at San Francisco recently, headed for Japan and a three-week study of Japanese textile trade.

Making the visit as guests of the Army Department and of General Douglas MacArthur's headquarters, the three were: Dr. W. P. Jacobs, president of the American Cotton Manufacturers Association, and colleagues Fred W. Symmes of Greenville, S. C., and Donald Comer of Sylacauga, Ala.

No idle curiosity venture, the trip was an outgrowth of concern over progressively increasing Japanese competition in American domestic markets. Some textile leaders believe the threat may become serious in a year or two.

The visiting textile men were to see at first hand the Japanese textile industry as rehabilitated under the MacArthur program. Indications were that discussions at Tokyo would relate to supplies of American and other raw cottons, and the Japanese domestic and foreign selling and pricing of textiles.

Meanwhile, disturbed textile men at home could eye the 10,000,000 yards of Japanese textiles that may become available monthly in the American home market and hope for good results from the trip. In the face of record American production, the added Japanese imports could mean trimmed prices on the domestic front.

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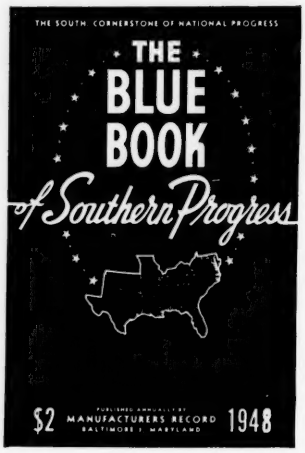

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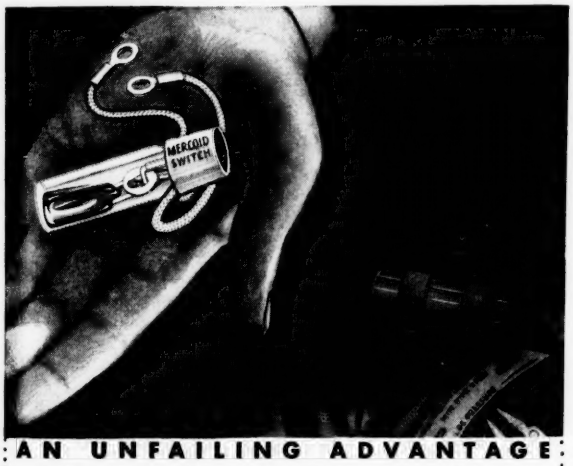

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HOTELS

Potomac Soundings

(*Continued from page* 21)

makes the limitation machinery automatically available for 1949 and 1950 should the world food situation improve sufficiently. Under the Agricultural Adjustment Act the Secretary has discretionary authority to suspend quotas when market conditions appear to warrant such action, despite the approving referendum.

U. S. production of peanuts in 1947 was 1,126,000 tons. About 200,000 tons go for farm consumption and seed, which leaves 926,000 tons for marketing. Domestic consumption for the year is estimated at 500,000 tons, leaving 426,000 tons for oil crushing and export. Export allocations of shelled peanuts from the 1947 crop total 127,000 tons through the first quarter of 1948. This leaves a marketable surplus of roughly 300,000 tons of peanuts from the 1947 crop for food exports under the several relief plans.

It comes to me like a bolt that in thirty years of reporting I have never heard a labor leader, at home or abroad, split a tonsil over the curse of inflation.

Come to think of it, I have never known a bonafide labor leader in good standing to be even bothered about the prospect of inflation.

So long as pay goes up every year, our broken-nose gentry contend that all is well, no matter what the dollar buys. In every inflation in history the national labor leadership, of whatever country, has been up front on the calliope.

Our own C.I.O. leads off this year with its demand for the third round of postwar wage increases in the auto industry. The principal railroad brotherhoods already are up to the formal strike vote, which calls upon the authorities to invoke the so-called cooling-off period. (This cooling-off period is merely a device of labor politics to trim down wage demand from 30 per cent to 15 per cent).

How does it happen that in a country as varied in its regional economic interests, as closely interdependent as majestically productive as these great United States, finds in its labor leaders only two stripes of economic council for the great body of industrious and thrifty working men and women? One type of labor leadership, now happily under proper legal surveillance, denounces capitalism as so much lost motion, and invokes three long cheers for the slave labor camps of the Volga and beyond.

The second type busies itself with an annual series of wage demands, neglecting for fifteen consecutive years the ever mounting portents of an inflation which now puts every family budget in the red.

There is ample evidence that Walter Reuther, for example, knows very well what inflation is, and what it must mean eventually to the great body of American workmen for whom he presumes to speak with unquestioned authority.

What, then, is Reuther's solution for the mounting inflation crisis?

One more round of wage increases!

The hollow sophistry that wages may continue upward while prices are held down by legislative ceilings, or that one more round of wage increases might be taken uniformly from industrial profits, are but smoke screens to hide the confusion of our storm-tossed labor leaders. Their economic navigation toward the more abundant life brings them out at a point where the compass no longer has meaning or significance.

Deep down inside, every man-jack among them knows that it's inflation that is eating him alive. But no responsible labor spokesman may face the fact honestly today, because he knows that he himself has been and is part and parcel of the inflation from the very beginning.

Did these gentlemen expect that money in circulation might expand from $4-billions to $28-billions without some commensurate degree of inflation?

Who among these gentlemen once warned the rank and file of American labor that federal deficits ranging from $4-billions to $60-billions a year made a clear national policy of inflation?

Did you ever hear a reputable labor leader say that inflation is an all-consuming inferno, in which labor is the first and most certain loser?

Whoever heard a real labor big-shot proclaim to his lambs in the flock that he was able to gain a 20 per cent wage increase each year only because he was at the moment on the top side of an inflation scramble?

The time is not far distant, one may say, when our bankrupt labor leadership must at least attempt an accounting of its stewardship.

And it might avert or deflect many indignant darts of reprisal and repudiation were they now to make some feeble beginning to stop the present esculator one step short of the economic stratosphere.

But labor won't do that.

Labor leads only when inflation is on the upside. When the bubble bursts the leadership only screams bloody murder.

On the way up, wise and prudent labor leadership gives the folks a well-deserved and well-earned wage increase every year. Then, on the inevitable downside of the cycle, our bleeding hearts of the A. F. L. and C. I. O. curse capitalism from the housetops and demand free lunch, more social security, more unemployment insurance, finally government management of all industries, as in England today.

Perhaps thirty consecutive years of more or less studious observation is not a sufficient basis for an opinion in these grave matters.

Maybe our labor leaders are smarter than we think. Perhaps they all understand clearly, with Stalin that inflation is the shortest road to revolution?

In either event, it's time for a change.

There is no reason in either history or common sense why 60-million working people in the United States should be condemned forever to a bankrupt labor leadership of economic illiteracy.

Most working people in this country understand the American enterprise system, and want to see it work.

Freed from the moral and spiritual stagnation which engulfs them today in the name of labor policy, they soon would make it work—gloriously and profitably for all.

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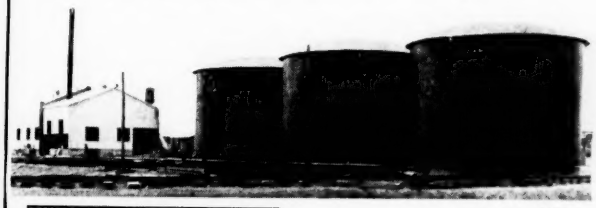

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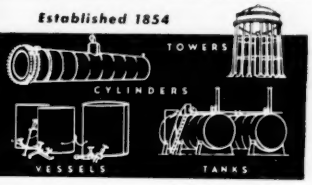

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COMING EVENTS

MARCH—

1-4—American Society of Mechanical Engineers, 1948 Spring meeting to be held March 1 to 4 in New Orleans. Nuclear energy will be the theme of a luncheon program opening the meeting, on Monday noon, March 1, at the St. Charles, the headquarters hotel.

4-5—United States Chamber of Commerce will hold one of its series of industrial relations conferences at Fort Worth on March 4 and 5. The purpose of these conferences is to orient employers and others concerned with employer-employee relations in the light of current developments, such as experience under the Taft-Hartley law, wage-price-profit trends, new legislative issues, and problems in contract negotiations.

9-10—Commercial Chemical Development Association, annual meeting at the Roosevelt Hotel in New York City on March 9 and 10. The business meeting will be held on the 9th and a series of papers will be given on the 10th.

15-19—American Society of Tool Engineers' Sixth Industrial Exposition is scheduled for March 15 to 19 in the Public Auditorium in Cleveland, Ohio, in conjunction with the sixteenth annual convention of ASTE. The convention program will include tours of industrial plants of various types, discussions led by qualified technical men and covering many phases of mass production. A feature event will be a banquet at which an internationally known industrialist will be the principal speaker.

APRIL—

5-8—The Third Southern Machinery and Materials Exposition will be held in the Atlanta Municipal Auditorium, April 5, 6, 7 and 8, 1948. Exhibitors for the 1948 Exposition will come from coast to coast and from the Great Lakes to the Gulf. Many Southern companies, as well as national organizations, will be included. Michael F. Wiedl has been named managing director of the Exposition for the third successive year. Exposition offices are located at 267 East Paces Ferry Rd., NE. Atlanta 5, Ga. Reservations, publicity and all Exposition matters are handled through this office.

7-9—The annual Spring Sales Conference of the American Gas Association on Industrial and Commercial Gas will be held this year in Windsor, Ontario, Canada, on April 7, 8 and 9. The first day of the conference will be given over entirely to industrial gas subjects. On the second day, the sessions will cover subjects of general interest to all gas men. The final day of the conference will be devoted to discussions of commercial gas subjects.

MAY—

3-7—The 1948 Foundry Congress and Show of the American Foundrymen's Association will be held from May 3 to 7 at Philadelphia, Pa.

JULY—

22-24—The ninth annual Cotton Research Congress will be held this year from July 22 to 24 at Dallas, Tex. Special attention will be given this year to international developments which are of vital importance to everyone from the smallest cotton producer to the largest segment of the industry. Other subjects that will receive increased emphasis will include the textile industry, consumers' preferences in cotton products and mechanization.

NOVEMBER—

15-17—American Oil Chemists Society will hold its fall meeting in New York City at the Pennsylvania Hotel on November 15, 16 and 17. Exhibits are in charge of Dr. R. H. Rogers, Jr., Swift and Co.

Carver Institute Opening Endowment Fund Drive

Coincidental with the issuance of the commemorative three-cent postage stamp which will bear a likeness of the late Dr. George Washington Carver, the Carver Foundation is opening an endowment fund drive for $2,000,000, which will enable it to carry on a program of research devoted to the development of native Southern resources for the benefit of agriculture and industry.

The importance of the drive has been intensified due to the recent fire that destroyed most of the Carver Museum and Laboratories. First efforts will be directed to the restoring of these buildings, in which will be placed the items of Dr. Carver that were salvaged, and in which the program of research will move ahead.

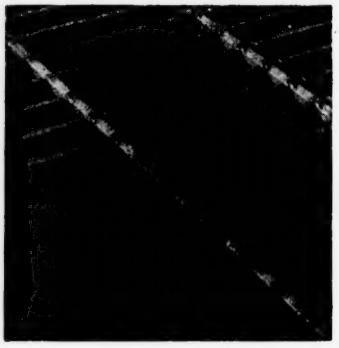
Peter Paul Acquires Plant To Serve Southwest

Peter Paul, Inc., the nation's third largest candy bar producer, recently acquired a 33,000-square-foot manufacturing plant in the Dallas area formerly occupied by Hollywood Manufacturing Co. Sale of the large structure on a three-acre tract for a consideration of slightly less than $200,000 was announced by Bryan Miller, executive vice president of the Texas Textile Mills.

The candy-making firm was founded in 1900 as a candy store, and in 1919 a small loft factory was opened at Naugatuck, Conn. From that date to this, the company has never lost money. In 1946 Peter Paul did a $21,000,000 national business, of which sixty-five per cent came from their Mounds and Almond Joy; twenty-five per cent from Walnettos and Choclettos, and ten per cent from Charcole Gum. 1947 figures were running in excess of this previous record.

Plans call for making Almond Joys and Mounds, the two big sellers, at the new Dallas plant. C. K. Kazanjian, Peter Paul's president, expects production to jump twenty-five per cent in 1948 chiefly because the new Dallas plant will deliver fresh candy to 10,000,000 customers in the Southwest by mid-year.

Headquarters for the company are at Naugatuck, and production from this base and two other plants already in operation at Philadelphia, Pa., and Oakland, Calif., accounts for shipment of more than five carloads of candy daily to 8,000 wholesalers throughout the nation, who in turn deliver to 800,000 retail outlets. Another branch plant, this one in Chicago, is planned for the near future.



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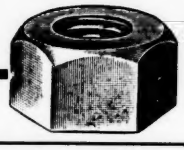

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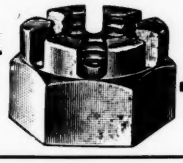

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Home Paper Honors Richard H. Edmonds

Time is long past since the South needed a champion. Even though fairly recent assertions may have been made to the effect that the region constituted some kind of a national economic problem, these have generally been accepted as the outpouring of those who knew the South only from the outside if at all. Within the region itself there existed no doubt of its might or ascendency. The need now is not for champions but for spokesmen to herald accomplishments achieved and from these to set up guideposts for continuing progress.

Times were, however, when Southern champions were in truth a real need, as many Southerners still living keenly remember. That such Southerners still hold a place in the hearts of their countrymen is evidenced by a lengthy review in the Norfolk *Ledger-Dispatch* of the life, ideals, and accomplishments of Richard Hathaway Edmonds, founder and first editor of MANUFACTURERS RECORD. Says the *Ledger-Dispatch* in part:

"Many a worthy man has been born in Norfolk, and gone forth to be of service in the world. But, in the now abounding economic development of Virginia and the South, no one man has ever done more than Richard H. Edmonds, the founder and brilliant editor of the MANUFACTURERS RECORD. The name of his magazine will likely give a reader too narrow a conception of its influence, scope and accomplishment. The voice of Edmonds was ever lifted to secure the development of the undeveloped resources and riches of the South—so long and so consistently overlooked and discounted.

For ten years (1872-82) he was assistant to the editor of a trade journal; from which, as we presume, he received the vision and the ideal for his life work. In 1881 he married Miss Addie L. Field and in 1882 established a very modest magazine with a very large name, "THE MANUFACTURERS RECORD," but this freshman had courage and iniative to put his ideas over, which he did with astonishing success.

Baltimore was the gateway to the South, with perhaps one-third of its population from the South or with sympathy for the aspirations of the South. From the first issue the young editor made it plain that he proposed to devote his energies to the rebuilding of the Southern States. The undeveloped wealth of the South in field, forest, mine, waterpower and many other minor resources was his theme—and he lived to see his ambition magnificently accomplished.

Not content with his magazine he was the author of a number of booklets, one of which he called "Facts About the South"—in contradiction to so much misinformation which has for years been published about the Southern people, their problems, their ambitions and their ability. In announcing his death October 4, 1930, an author reviewed his career in these significant words:

"He was born in Norfolk, Va., and died in Baltimore after a prolonged illness. Since early manhood he had devoted his energies to the development of the Southern States. While never of robust health, his energy was tremendous, and he gave his all to his devoted work."

What is your Outlook?

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Research Council Issues Re-Declaration of Rights

Alarmed by what seemed to be an ever increasing governmental encroachment upon state and individual rights, directors of the Southern States Industrial Council met in Nashville recently to take stock of the trend and if possible to decide what should be done.

To the council, the collectivist policies of the Government were a serious threat to the future welfare of the nation. Its members decided that what was needed was a quick return to the Jeffersonion concept of democracy; that government is best which governs least.

Results of the meeting was the issuance of "A Re-Declaration of Rights" embracing these 12 points:

1. The restoration of a sound monetary system, based on the gold standard.

2. The adoption of systematic plan for payment of the national debt.

3. The balancing of the national budget in times of peace.

4. The reduction of federal expenses, and the elimination of all unessential federal employees.

5. The withdrawal of the federal government from competition with private business.

6. The restraint of all monopolies, whether government, business or labor.

7. Elimination of federal subsidies and establishment of a public policy condemning same.

8. The establishment of a sound tax system that will restore and protect the incentive to produce.

9. A return to states rights, and the restoration of local self-government.

10. A public policy rededicated to the protection of the right to acquire and own private property, and guaranteeing equality of obligation in all contractual relations.

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Mengel Acquires Interest In Plastics Concern

Mengel Co., Louisville, Ky. and United States Plywood Corp. have announced that they have jointly acquired a two-third stock interest and fifty per cent voting power in Blanchard Deco Plastics, Inc.

The two companies will each have a one-third ownership share in the purchased corporation, with Blanchard Bros. and Lane, and their associates, original owners, also holding a one-third interest, and fifty per cent voting power.

The name of the company will be changed to Deco Plastics, Inc. It will continue to manufacture and distribute decorated vinyl plastic sheeting, known as Balnehardized Vinylite. This product, now being produced at Hackettstown, N. J., will be manufactured at plant facilities set up in space available by the Mengel Co. in Louisville.

Freight Car Production Triples In Ten Months

Figures recently released by the American Railway Car Institute show that freight car production for American Railroads reached a peak of 9,803 cars during December, more than tripling January production of the same year.

Reporting for the month, the institute said that the car builders delivered 7,661 cars and the railroad shops produced 2,142. In January of last year the car builders delivered 2,265 domestic freight cars and the railroads themselves constructed 717.

During the year, with production showing a steady increase, 68,487 new cars were added to the domestic fleet, while at the same time the car builders completed construction of 27,646 for export. Export shipments which were abnormal due to a 1946 order for 36,000 cars for the rehabilitation of France, are expected to be small during the coming year unless stepped up under the Marshall Plan. Relatively few export orders are now on the books of the car builders.

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INDEX FOR BUYERS

Page Numbers Indicate Where Products Can Be Found

Aluminum 17
Architects 72
Babbitt Metals 67
Banks and Bankers 19, 20, 60
Bearings (Ball) 10
Belt Lacing 59
Bridges 61, 68
Canning Machinery 69
Chemists 72
Compressors 10
Contractors 72, 73
Crushers 76
Drawing Materials 68
Dredging Contractors 73
Electrical Machinery 10
Engineers 13
Fencing 76
Flooring (Steel) 74
Forgings (Steel) 4
Galvanizing 68
Gas (Natural) 77
Gears 63, 78
Granite 67
Grating (Steel) 66
Hotels 60, 64
Locomotives 58
Lumber (Creosoted) 65
Machinery (New and Second Hand) 70, 71
Machine Tools 63
Medals and Trophies 69
Perforated Metals 67
Phosphates 2
Piling, Poles, etc. (Creosoted) 65
Pillow Blocks 26, 78
Pipe (Cast Iron) 29, 68
Pipe (Steel and Iron) 74
Plating (Metal) 61
Power Transmission Appliances 78
Preservative (Wood) 3
Professional Directory 72, 73
Railroads 7, 24, 27
Road and Street Material 67, 73
Roofing 63
Sand and Gravel 67, 73
Screens 67
Screws and Nuts 67, 74
Sheets (Steel, Galvanized) 14, 63, 74
Shipbuilding 6, 75
Sites (Industrial) 5, 6, 7, 8, 24, 27, 61, 69, 77
Speed Reducers 78
Sprinklers 73
Stampings (Steel) 4
Steel Plate Work 14, 28, 61, 68
Steel Products 14, 30, 74
Stone (Crushed) 67, 73
Structural Steel 22, 25, 28, 57, 59, 61, 68, 74, 75
Tanks and Towers 24, 65, 68
Telephone Service 53
Temperature Control 63
Treads (Stair) 66
Trucks (Industrial) 59
Turbines (Hydraulic) 73
Water Supply 73, 75
Wood Preservative 3

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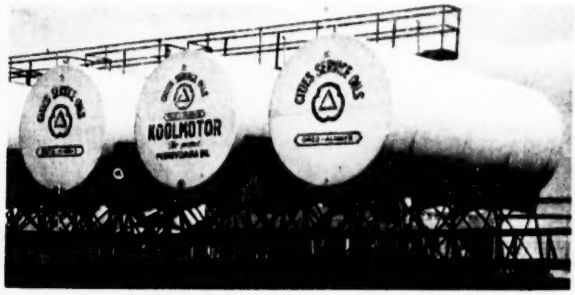

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INDEX OF ADVERTISERS

— A —

Aaron Machinery Co., Inc. 70
Affiliated National Hotels 64
Air Compressor Rental Co. 71
Alabama Power Co. ..... —
Albert & Davidson Pipe Corp. .. 71
Albert Pipe Supply Co. 71
Aljohn Diesel Co., Inc. 71
Allied Steel Products Corp. 59
Aluminum Co. of America 17
American Air Compressor Corp. 71
American Bridge Co. 6
American Creosote Works 65
American Lumber & Treating Co. —
American Telephone & Telegraph Co. 53
Archer & Baldwin, Inc. 70
Armco Drainage & Metal Products, Inc. 57
Arundel Corporation 73
Atlantic Creosoting Co., Inc. 65
Atlantic Gulf & Pacific Co. .... —
Atlantic Steel Co. 4
Atlas Fence Co. 76

— B —

Barnes & Reinecke, Inc. ..... —
Barrett Division ..... —
Batson-Cook Co. 72
Bell, Trice M. 72
Belmont Iron Works 61
Bethlehem Steel Co. 30
Binder Cooperage Co. 71
Birmingham Tank Co. 75
Blair, Algernon 72
Box 1216 69
Boxley & Co., W. W. 67
Bridgeport, Ala., Chamber of Commerce 69
Bristol Steel & Iron Works, Inc. 68
Brown Steel Contractors 65
Burford, Hall & Smith 73

— C —

C & S Machinery Co. 70
Carolina Steel & Iron Co. 68
Cattie & Bros., Joseph P. 68
Chapman Chemical Co. 3
Chattanooga Boiler & Tank Co. 65
Chicago Bridge & Iron Co. 22
Childersburg, Alabama 69
Cole Mfg. Co., R. D. 65
Converse Bridge & Steel Co. 68
C-P-C-S 71
Crawford Sprinkler Supply Co. .. 73
Credit Merchants Association .. 69

— D —

Darien Corp. 71, 71
Davenport Locomotive Works .. —
Davidson Engineering Co. 73
Davis & Son, G. M. 65
Delta Equipment Co. 70
Devens, Lawrence 69
Dixie Mfg. Co., Inc. ..... —
Douglass Co., Stephen A. 71
Duquesne Electric & Mfg. Co. .. —

— E —

Earle Gear & Machine Co. 63
Eaton, Paul B. 71
Edgewater Apartments, The 71
Electric Service Co. 70
Empire District Electric Co. 5
Ensenat & Co., Inc. ..... —
Eppinger and Russell Co. 65
Equitable Securities Corp. 19, 20
Erdle Perforating Co. 67

— F —

Fairbanks-Morse Co. ..... —
Feild, W. Terry 72
Fielder Co., C. L. 61
First & Merchants National Bank of Richmond (Va) 60
Fisher Co., Adam 71
Flexible Steel Lacing Co. 59
Ford, Bacon & Davis, Inc. 72
Froehling & Robertson 72

— G —

Gilbert Engineering Co. 72
Glamorgan Pipe Fdy. Co. 68
Greenpoint Iron & Pipe Co. 71
Gruendler Crusher & Pulverizer Co. 76
Guyan Machinery Co. 70

— H —

Hackett Co., J. Lee 71
H. & P. Machinery Co. 70
Hardaway Contracting Co. 72
Hardy & Son, George F. 72
Harnischfeger Corp. ..... —
Harrington & King Perforating Co. 67
Harte Co., John J. 72
Heinicken, W. P. 71
Hoosier Engineering Co. 72
Houston Pipe Line Co. ..... —
Hunnicut Engineering Co., Inc. .. 72
Hunt's Sons, M. J. ..... —

— I —

Industrial Equipment Corp. ... 70
Industrial Service Bureau, Columbia, S. C. 61
Ingalls Iron Works Co. 75
Ingalls Shipbuilding Corp. 75
International Business Machines —
International Minerals & Chemical Corp. 2
Iron & Steel Products, Inc. ..70, 71

— J —

Jack & Heintz Precision Industries, Inc. 10
Johnson Steel & Wire Co., Inc. —
Jones Foundry & Machine Co., W. A. 78

— K —

Kewaunee Mfg. Co. ..... —
Kline Iron & Metal Co. 61
Knox Co., Earl E. 70

— L —

Lancaster Iron Works ..... —
Layne & Bowler, Inc. 75
Lebanon Steel Foundry ..... —
Link-Belt Co. ..... —
Lorraine, G. B. 69
Lyon, Conklin & Co., Inc. 63

— M —

Manhattan Perforated Metal Co. 67
Marine Metal & Supply Co. .71, 71
Mercoid Corp. 63
Metalplate Co. 61
Mid-West Screw Products Co. .. 67
Mississippi Valley Equip. Co. .. 70
Missouri Resources & Development Board 6
Moffatt Bearings Co. ..... —
Morgans, Inc. 69
Mundt & Sons, Chas. 67

— N —

New Hampshire Fire Insurance Co. ..... —
Newport News Shipbuilding & Dry Dock Co. 73
Norfolk & Western Railway .. 27
North Carolina, Dept. of Conservation and Development ... —
North Carolina Granite Corp. .. 67
No. 9719 71

— O —

O'Brien Mchy. Co. 70
O'Neil-Irwin Mfg. Co. 63

— P —

Peerless Pump Division Food Machinery Corp. ..... —
Peninsula Industrial Committee, Newport News, Va. 8
Penn Machinery Co. 71
Philadelphia Transformer Co. ..70, 71

— Q —

Quinn Wire & Iron Works ..... —

— R —

Resale Dept. 70, 71
Robert and Co. Associates ... 72
Robins & Co., Inc., A. K. 69
Rogers & Co, Ralph H. ..... —
Ruberoid Co. ..... —
Ryerson & Son, Inc., J. T. 73

— S —

Sanderson & Porter 72
Saxe, Williar & Robertson 72
Seaboard Air Line Railroad Co. 24
Seitzinger's Sons, Thomas F. ... 67
Service Caster & Truck Corp. .. 59
Shimer & Sons, Samuel J. 67
Sirrine Co., J. E. 73
Slaysman Co. 26
Smith Co., H. Y. ..... —
Snare Corp., Frederick 73
South Carolina State Ports Authority ..... —
Southern Business Brokers 71
Southern Hotel 60
Southern Machinery & Metals Exposition, Third 55
Southern Natural Gas Co. ..... —
Southern Railway System 7
Southern Steel Works 25
Sowerby, F. W. 71
Standard Steel Spring Co. 66
Stanhope, Inc., R. C. 70
Star Sash Balance Corp. 71
Steel Construction Co. 75
Stevens, Carl A. 72
Stone & Webster Engineering Corp. 13
Strand & Co., N. A. ..... —
Sydnor Pump & Well Co., Inc. .. 72

— T —

Tennessee Coal Iron & Railroad Co. ..... —
Thompson Foundry & Machine Co. 69
Timanus & Associates, Inc. ... 72

— U —

Union Trust Co. of Md. 66
United Gas Pipe Line Co. 77
U. S. Pipe & Foundry Co. 23
United States Steel Corp. Subsidiaries 6, 29

— V —

Virginia Bridge Co. 29
Virginia Engineering Co. 72

— W —

Wagner Co., Arthur 70
War Assets Administration ..... —
Watson & Hart 72
Weber Co., F. 60
Whitcomb Locomotive Co. 58
Whitman, Requardt & Associates 72
Wiedeman & Singleton, Inc. 72
Wiley & Wilson 72
Wisconsin Motor Corp. ..... —

— Y —

Youngstown Sheet & Tube Co. .. 1

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